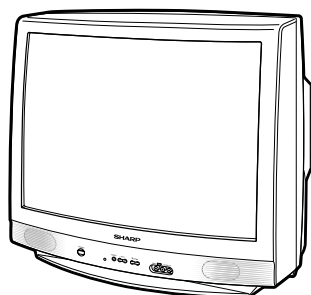
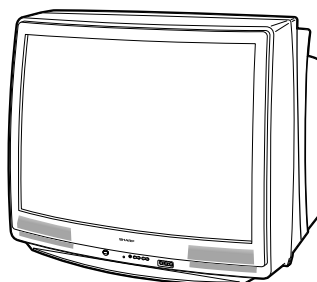


# SHARP SERVICE MANUAL

S12F332U-S50/

**32U-S50****32U-S60  
36U-S60****COLOR TELEVISION****Chassis No. MS-B**

**32U-S50/60  
36U-S60**

**MODELS**

In the interests of user-safety (Required by safety regulations in some countries ) the set should be restored to its original condition and only parts identical to those specified should be used.

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**ELECTRICAL SPECIFICATIONS**

POWER INPUT ..... 120V AC 60 Hz

POWER RATING

32U-S50/60 ..... 152W

36U-S60 ..... 167W

PICTURE SIZE

32U-S50/60 ..... 3,073cm<sup>2</sup> (476sq inch)

36U-S60 ..... 3,905cm<sup>2</sup> (605sq inch)

CONVERGENCE ..... Magnetic

SWEEP DEFLECTION ..... Magnetic

FOCUS ..... Hi-Bi-Potential Electrostatic

INTERMEDIATE FREQUENCIES

Picture IF Carrier Frequency ..... 45.75 MHz

Sound IF Carrier Frequency ..... 41.25 MHz

Color Sub-Carrier Frequency ..... 42.17 MHz  
(Nominal)

**AUDIO POWER**

OUTPUT RATING ..... 3.0W + 3.0W (at 10% distortion and  
Dual CH Operate)

**SPEAKER**

SIZE ..... 12 cm x 6 cm oval (2 pcs.)

VOICE COIL IMPEDANCE ..... 8 ohm at 400 Hz

**ANTENNA INPUT IMPEDANCE**

VHF/UHF ..... 75 ohm Unbalanced

**TUNING RANGES**

VHF-Channels ..... 2 thru 13

UHF-Channels ..... 14 thru 69

CATV Channels ..... 1 thru 125

(EIA, Channel Plan U.S.A.)

***Specifications are subject to change without prior notice.***

**SHARP CORPORATION**

This document has been published to be used for after sales service only.

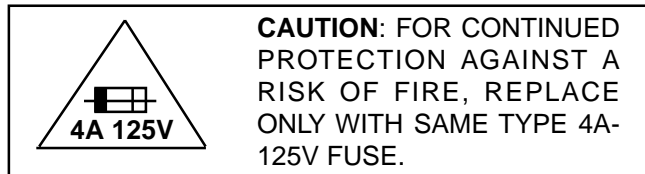
The contents are subject to change without notice.

## IMPORTANT SERVICE SAFETY PRECAUTION

- **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

### WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.  
To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.



### SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

**When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)**

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

### X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.  
It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.
2. It is essential that servicemen have available at all times an accurate high voltage meter.  
The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a color chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver.  
Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

# IMPORTANT SERVICE SAFETY PRECAUTION

## (Continued)

### BEFORE RETURNING THE RECEIVER

#### (Fire & Shock Hazard)

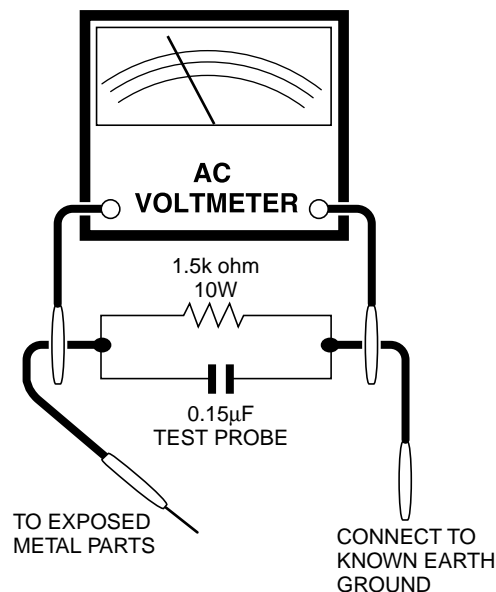
Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.
  - Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
  - Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15 $\mu$ F capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
  - Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.

- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.

All checks must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)

Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



### SAFETY NOTICE

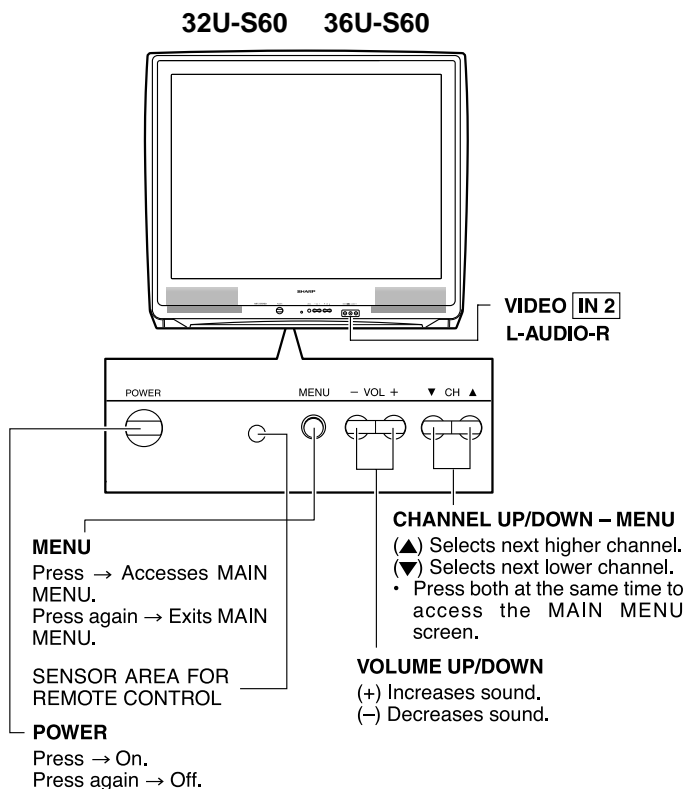
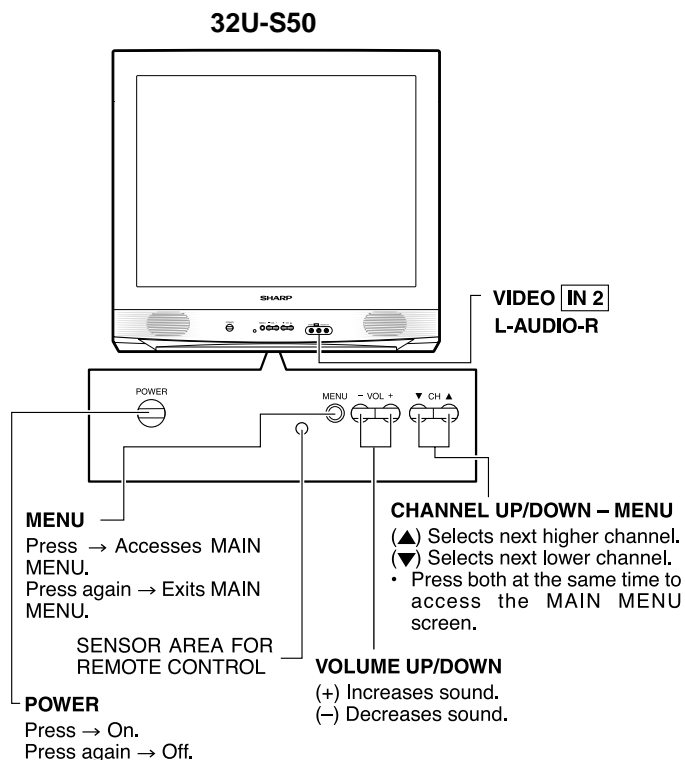
Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.

Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by " $\triangle$ " and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

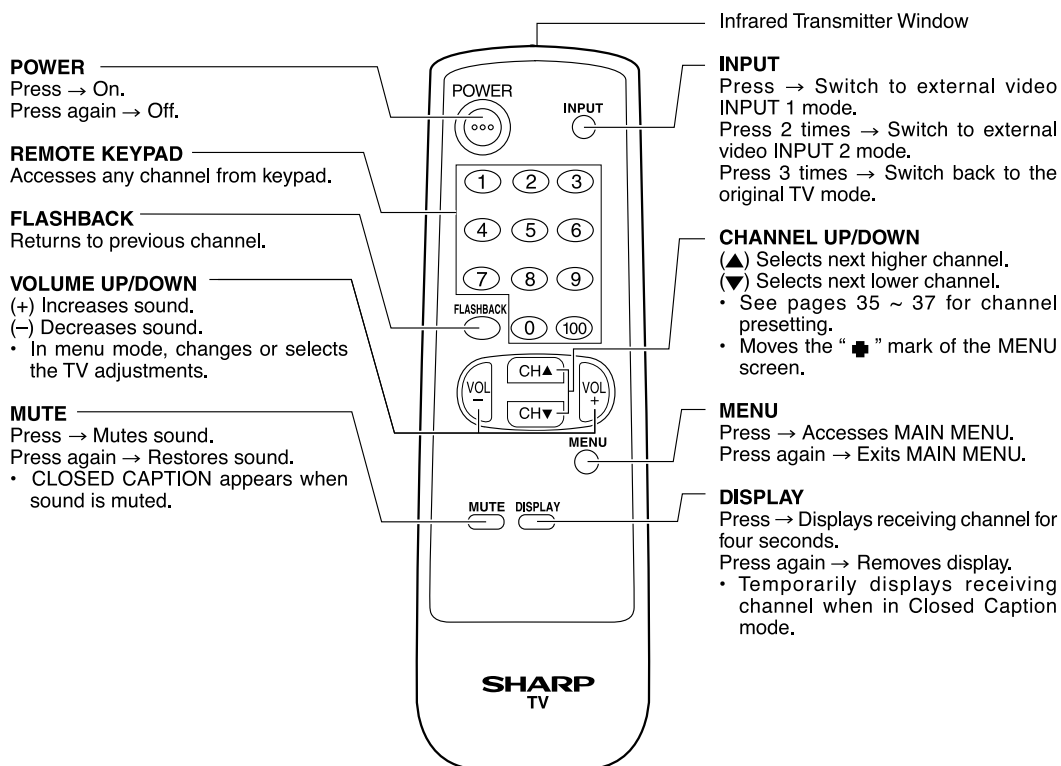
For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

# LOCATION OF USER'S CONTROL

## Front Panel



## Basic Remote Control Functions





# INSTALLATION AND SERVICE INSTRUCTIONS

- Note:** (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.  
(2) Before performing adjustments, the TV set must be on at least 15 minutes.

## CIRCUIT PROTECTION

The receiver is protected by a 4.0A fuse (F701), mounted on PWB-A, wired into one side of the AC line input.

## X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 120V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP651 and make sure that the voltmeter reads  $13.2 \pm 0.7V$ .
5. Apply external 16.3V DC at TP651 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord and plug the AC cord power on. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

## HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified checks should be as follows:

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 120V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service adjustment "V18" and Bus data "01" (Y-mute on, CRT Cut Off).
4. The voltage should be approximately 33.0kV (at zero beam).  
If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.

**Note:** There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required. See "Table-B" to determine, if service adjustments are required.

### 1. Service mode

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer controls are in their proper (reset) position.

### 2. Service number selection

Once in the service mode, press the Ch-up or Ch-down button on the remote controller or at the set. The service adjustment number will vary in increments of one, from "V01" to "P08". Select the item you wish to adjust.

### 3. Data number selection

Press the Vol-up or Vol-down button to adjust the data number.

### To enter the service mode and exit service mode.

To enter the service mode manually just press and hold the Vol-down and Ch-up buttons at the same time, plug the AC cord into a wall socket.

Now the TV set is switched on and enters the service mode.

To exit the service mode, turn the television off by pressing the power button.

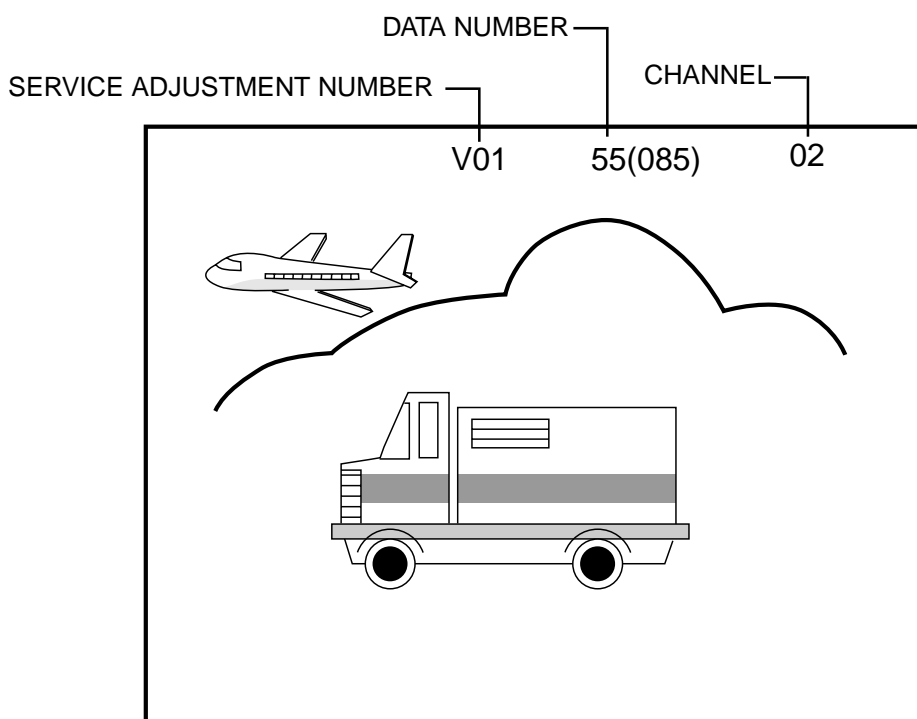


Figure A.

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		ADJUSTMENT CONTENTS
		INITIAL VALUE	RANGE	
V01	PICTURE	03	0-15(00h-0Fh)	Must be set to "10"
V02	TINT	3E	0-127(00h-7Fh)	
V03	COLOR	2D	0-127(00h-7Fh)	
V04	SUB-COLOR	10	0-31(00h-1Fh)	
V05	BRIGHT	4D	0-127(00h-7Fh)	
V06	R CUT-OFF	40	64-255(40h-FFh)	
V07	G CUT-OFF	40	64-255(40h-FFh)	
V08	B CUT-OFF	40	64-255(40h-FFh)	
V09	G DRIVE	40	0-127(00h-7Fh)	
V10	B DRIVE	40	0-127(00h-7Fh)	
V11	SHARP	14	0-63(00h-3Fh)	Must be set to "1E"
V12	N PHASE	01	0-3(00h-03h)	Must be set to "01"
V13	DC RESTORATION	00	0-3(00h-03h)	Must be set to "00"
V14	BLACK STRETCH	03	0-3(00h-03h)	Must be set to "03"
V15	ABL START POINT	03	0-3(00h-03h)	Must be set to "03"
V16	ABL GAIN	02	0-3(00h-03h)	Must be set to "02"
V17	$\gamma$ POINT	00	0-3(00h-03h)	Must be set to "00"
V18	Y-MUTE/V-STOP	00	0-2	"00"=Normal, "01"=No-Y, "02"=No-Y & No-Vertical
V19	ENERGY SAVE	28	0-63(00h-3Fh)	Must be set to "28"
V20	RTONE-G	F6	0-255(00h-FFh)	Must be set to "F6"
V21	RTONE-B	F6	0-255(00h-FFh)	Must be set to "F6"
V22	BTONE-G	00	0-255(00h-FFh)	Must be set to "00"
V23	BTONE-B	0A	0-255(00h-FFh)	Must be set to "0A"
V24	LOW-G	F7	0-255(00h-FFh)	Must be set to "F7"
V25	LOW-B	E8	0-255(00h-FFh)	Must be set to "E8"
V26	ML-G	00	0-255(00h-FFh)	Must be set to "00"
V27	ML-B	F9	0-255(00h-FFh)	Must be set to "F9"
V28	HIGH-G	03	0-255(00h-FFh)	Must be set to "03"
V29	HIGH-B	06	0-255(00h-FFh)	Must be set to "06"
V30	WPS	01	0-1	Must be set to "01"
V31	RGB CONTRAST	20	0-63(00h-3Fh)	Must be set to "2A"
V32	Y-DL	02	0-7(00h-07h)	Must be set to "02"
V33	Y-DL-INPUT	01	0-7(00h-07h)	Must be set to "01"
V34	VSM GAIN	07	0-7(00h-07h)	Must be set to "07"
V35	N COMB	01	0-1	Must be set to "01"
V36	BPF/TOF-INPUT	00	0-1	Must be set to "00"
V37	CORING	00	0-1	Must be set to "00"
V38	VSM PHASE	00	0-1	Must be set to "00"
V39	COLOR $\gamma$	00	0-1	Must be set to "00"
V40	SHARP-INPUT	14	0-63(00h-3Fh)	Must be set to "1E"
V41	TINT-INPUT	3E	0-127(00h-7Fh)	
V53	C-TRAP	00	0-1	Must be set to "00"
R01	RF-AGC	24	0-63(00h-3Fh)	
R02	PIF VCO coil	-		
R03	RF-AGC REF	5C	0-255(00h-FFh)	Must be set to "5C"
D01	V POSITION	00	0-7(00h-07h)	
D02	H POSITION	10	0-31(00h-1Fh)	
D03	V SIZE	12	0-63(00h-3Fh)	
D04	H SIZE	1F	0-63(00h-3Fh)	
D05	V-LINEARITY	07	0-15(00h-0Fh)	
D06	V-S CORRECTION	08	0-15(00h-0Fh)	Must be set to "08"
D07	EW PARABOLA	21	0-63(00h-3Fh)	
D08	EW TRAPEZIUM	0E	0-31(00h-1Fh)	
D09	EW CORNER	0C	0-15(00h-0Fh)	
D10	AFC GAIN	02	0-3(00h-03h)	Must be set to "02"
D11	V EHT	07	0-7(00h-07h)	Must be set to "07"
D12	H EHT	03	0-7(00h-07h)	Must be set to "03"
EX1	FAO VOLUME	24	0-50(00h-32h)	Must be set to "24"
EX2	CC-POSITION	21	0-127(00h-7Fh)	
EX3	INT	7A	0-255(00h-FFh)	Must be set to "7A"
EX4	A-ATT	5A	0-127	
OP1	OPTION1	BO	0-255(00h-FFh)	Must be set to "B7" (32R-S450,36R-S450), "A7" (CR32S45,CR36S45)
OP2	OPTION2	31	0-7(00h-07h)	Must be set to "01"

Table - A

SERVICE NUMBER	ADJUSTMENT ITEM	DATA		ADJUSTMENT CONTENTS
		INITIAL VALUE	RANGE	
M01	INPUT LEVEL	09	0-15(00h-0Fh)	
M02	MTS VCO	24	0-63(00h-3Fh)	
M03	FILTER	1F	0-63(00h-3Fh)	
M04	WIDEBAND	18	0-63(00h-3Fh)	
M05	SPECTRAL	10	0-63(00h-3Fh)	

**Table - A**

Holding down both the VOL-up and CH-up buttons on the TV set at service mode for more than 2 seconds will automatically write the above initial values into IC2102.

PART REPLACED	ADJUSTMENT		NOTES
	NECESSARY	UNNECESSARY	
IC2001		X	Data is stored in IC2102.
IC201	X		The adjustment is needed to compensate for characteristics of parts including IC201 and MTS level (M01).
IC2102	X		Holding down both the VOL-up and CH-up buttons on the TV set in the service mode for more than 2 seconds will automatically write the above initial values into IC2102. Then perform a complete adjustment.
CRT	X		Adjust items related to picture tube only.
IC3001	X		Adjust items related to MTS only (M01~M05).
IC1801	X		Adjust items related to P-IN-P only (P01~P08).

**Table - B**

# SERVICE ADJUSTMENT

## VCO Adjustment

1. Connect a digital voltmeter between pin (55) of IC201 and ground.
2. Receive a good local channel.
3. Enter the service mode and select the service adjustment "R02".
4. Adjust T201 so that digital voltmeter reads  $2.5 \pm 1.0 \text{VDC}$ .
5. Adjustment is completed, remove the voltmeter, return to "normal" mode.

## RF AGC Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "R01".
3. Set the data value to point where no noise or beat appears.
4. Select another channel to confirm that no noise or beat appears.

**Note 1 :** You will have to come out of the service mode to select another channel.

**Note 2 :** Setting the data to "00" will produce a black raster.

## Screen Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "V03" and set the data value to "00" to set the color level to minimum. (Record original data code under adjustment "V03" before changing) You may skip this step, if you selected a B/W picture or monoscope pattern.
3. Select the service adjustment "V18" and adjust the data value to "01", this turn off the luminance signal (Y-mute).
4. Adjust the master screen control until the raster darkens to the point where raster is barely seen.
5. Adjust the service adjustments "V06" red, "V07" green and "V08" blue to obtain a good grey scale with normal whites at low brightness level.
6. Select the service adjustment "V18" and reset data to "00". Select the service adjustment "V03" and reset data to obtain normal color level.
7. For component input, the data value of "V46" red, "V47" green and "V48" blue is adjusted to follow the data value of "V06", "V07" and "V08" respectively.
8. Reset the master screen control to obtain normal brightness range.

## White Balance Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service adjustment "V03" and set to "00" (minimum color)(Record original data code under adjustment "V03" before changing). "V03" does not have to be adjusted, if you selected a B/W picture or monoscope pattern.
3. Alternately adjust the service adjustment data of "V09" and "V10" until a good grey scale with normal whites is obtained. (RF Input)
4. For component input, the data value of "V49" and "V50" is adjusted to follow the data value of "V09" and "V10" respectively.
5. Select the service adjustment "V03" and reset data to obtain normal color level.

## Picture Adjustment

1. Receive a good local channel.
2. Make sure the customer picture control is set to maximum.
3. Enter the service mode and select the service adjustment "V01".
4. Adjust the data value to achieve normal contrast range.

## Tint Adjustment

1. Receive a good local channel.
2. Set customer tint control to center of it's range.
3. Enter the service mode and select the service adjustment "V02".
4. Adjust "V02" data value to obtain normal flesh tones.
5. Input same data to "V41".

## Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position .
3. Enter the service mode and select service adjustment "V04".
4. Adjust "V04" data value to obtain normal color level.

## Brightness Adjustment

1. Receive a good local channel.
2. Make sure the customer brightness control is set to center position.
3. Enter the service mode and select the service adjustment "V05".
4. Adjust "V05" data value to obtain normal brightness level.

Vertical-Size and Linearity Adjustments

- 1. Receive a good local channel.
- 2. Enter the service mode and select the service adjustment "D03" for V-size.
- 3. Adjust the "D03" bus data to get the proper V-size.
- 4. For V-linearity adjustment, select data bus "D05" and adjust to get the proper vertical linearity.

**Note:** Aging for 10 min before adjustment. After the adjustment of V-center and V-size, re-adjustment for this V-line.

Vertical Phase Adjustment

- 1. Enter the service mode and select the service adjustment "D01".
- 2. Adjust "D01" data value so that picture is centered.

Horizontal Position Adjustment

- 1. Receive a good local channel.
- 2. Enter the service mode and select the service adjustment "D02".
- 3. Adjust "D02" data value so that picture is centered.

Caption Position Adjustment (Horizontal)

- 1. Receive a good local channel.
- 2. Enter the service mode and select the service adjustment "EX2".
- 3. A black text box appears on the screen. (see **Figure B.** below)
- 4. Adjust "EX2" data value so that text box is positioned in the center of the screen.

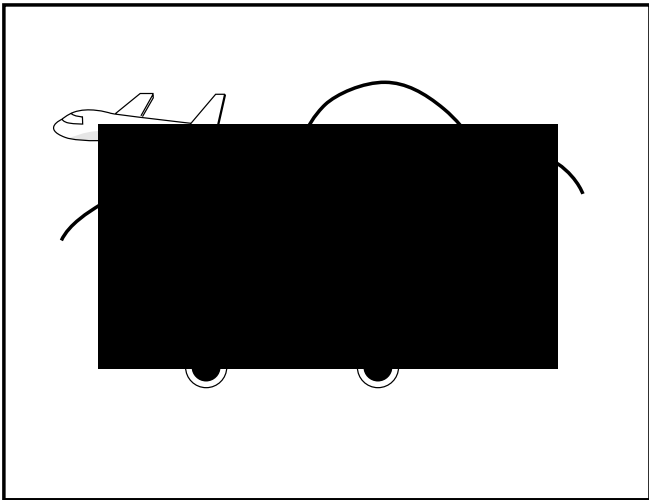


Figure B.

Horizontal-Size Adjustment

- 1. Receive a good local channel.
- 2. Enter the service mode and select the service adjustment "D04" for H-size.
- 3. Adjust the "D04" bus data to get the proper H-size.

EW-Parabola

- 1. Receive a good local channel.
- 2. Enter the service mode and select the service adjustment "D07" for EW parabola.
- 3. Adjust the "D07" bus data to get the proper vertical straight line for both left and right side.

EW-Trapezium

- 1. Receive a good local channel.
- 2. Enter the service mode and select the service adjustment "D08" for EW-Trapezium.
- 3. Adjust the "D08" bus data to get the best position display.

EW-Corner

- 1. Receive a good local channel.
- 2. Enter the service mode and select the service adjustment "D09" for EW-Corner.
- 3. Adjust the "D09" bus data to get the best linearity for 4 corner points.

Other Adjustments

- 1. Enter the service mode.
- 2. Adjust the following data values as listed below.

SERVICE POSITION	ADJUST ITEM	DATA(Hex)
		32U-S50/60, 36U-S60
OP1	OPTION1	130
OP2	OPTION2	31

## ■ MTS ADJUSTMENT

### MTS Level Adjustment

1. Receive the following composite signal.  
Monaural signal: 400Hz, 100% modulation
2. Connect the rms voltmeter to pin (39) of IC3001.
3. Enter the service mode and select the service adjustment "M01" and set to "09".
4. Enter the service mode and select the service adjustment "EX4".
5. Adjust the data so that the rms voltmeter reads  $490 \pm 10$  mVrms.

### MTS VCO Adjustment

1. Keep the unit in no-signal state.
2. Connect the frequency counter to pin (39) of IC3001.
3. Connect a capacitor (100 $\mu$ F, 50V) in between positive(+) side of C3005 and ground.
4. Enter the service mode and select the service adjustment "M02".
5. Adjust the data so that the frequency counter reads  $62.94 \pm 0.75$  kHz.

### Filter Adjustment

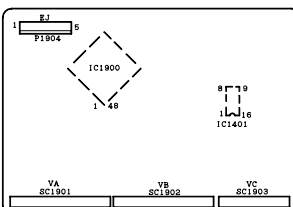
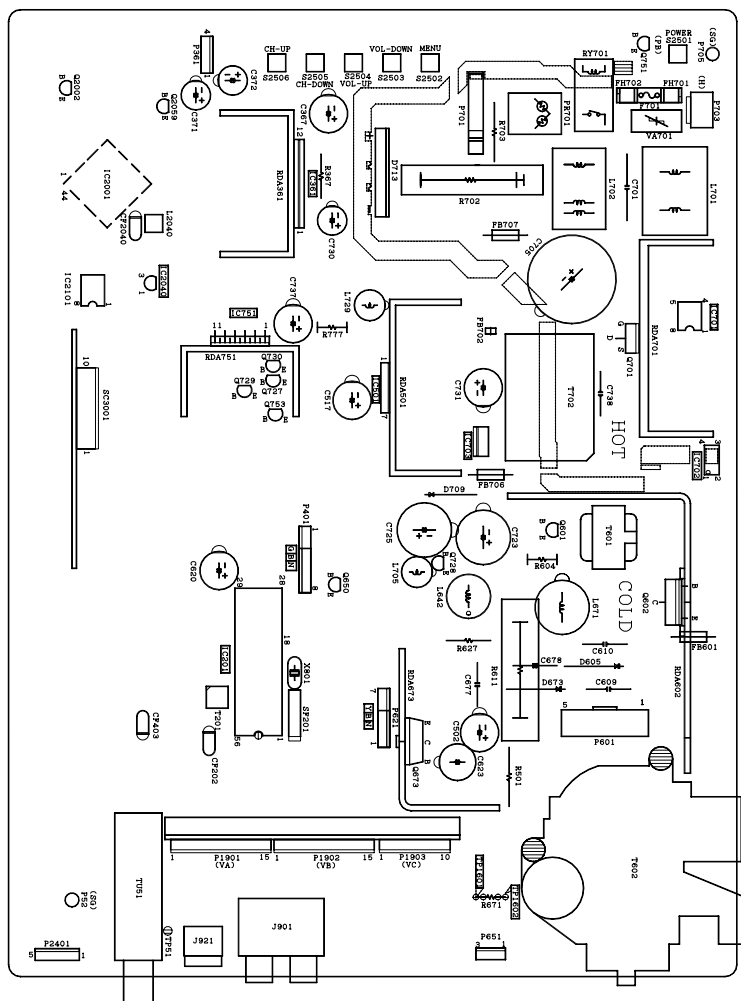
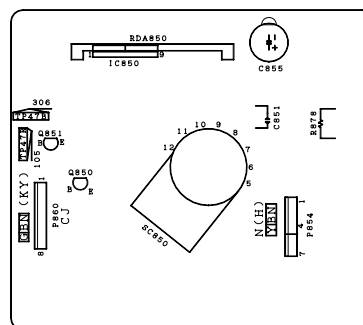
1. Feed the following stereo pilot signal to pin (14) of IC3001 .  
Stereo pilot signal: 9.4kHz, 600mVrms.
2. Enter the service mode and select the service adjustment "M03".
3. Adjust the data until "OK" appears in position on the screen. Make sure the "OK" is displayed almost at the center of the data range.

### Separation Adjustment

1. Connect the rms voltmeter to pin (39) of IC3001.
2. Receive the following composite stereo signal 1.  
Composite stereo signal: 30% modulation, left channel only, noise reduction on, 300Hz
3. Enter the service mode and select the service adjustment "M04".
4. Adjust the data until the AC voltage reading of the RMS voltmeter is minimum.
5. Receive the following composite stereo signal 2.  
Stereo signal: 30% modulation, left channel only, noise reduction on, 3kHz
6. Enter the service mode and select the service adjustment "M05".
7. Adjust the data until the AC voltage reading of the rms voltmeter is minimum.
8. Take the above steps 1 thru 7 again for fine adjustment.

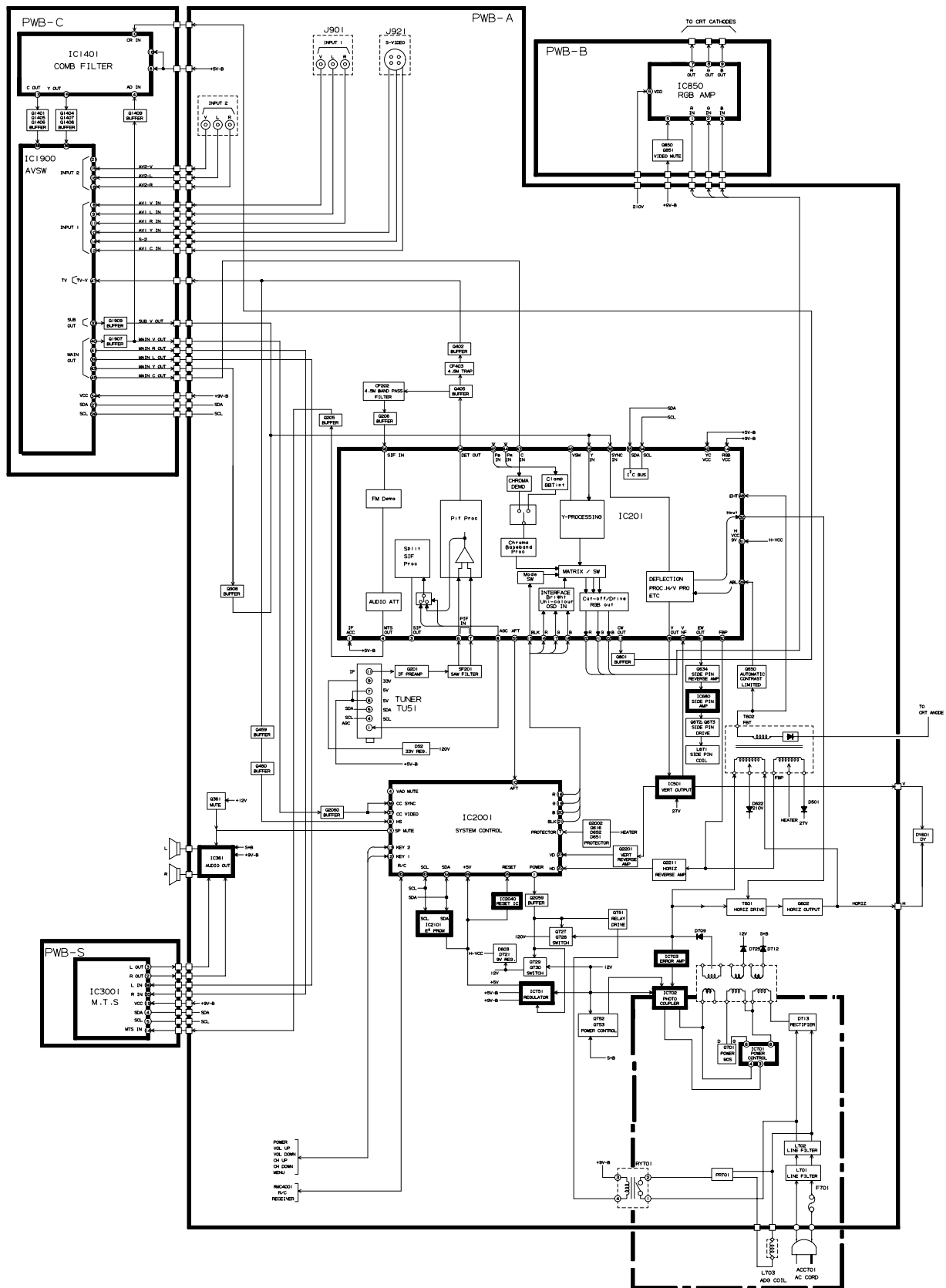


**A**

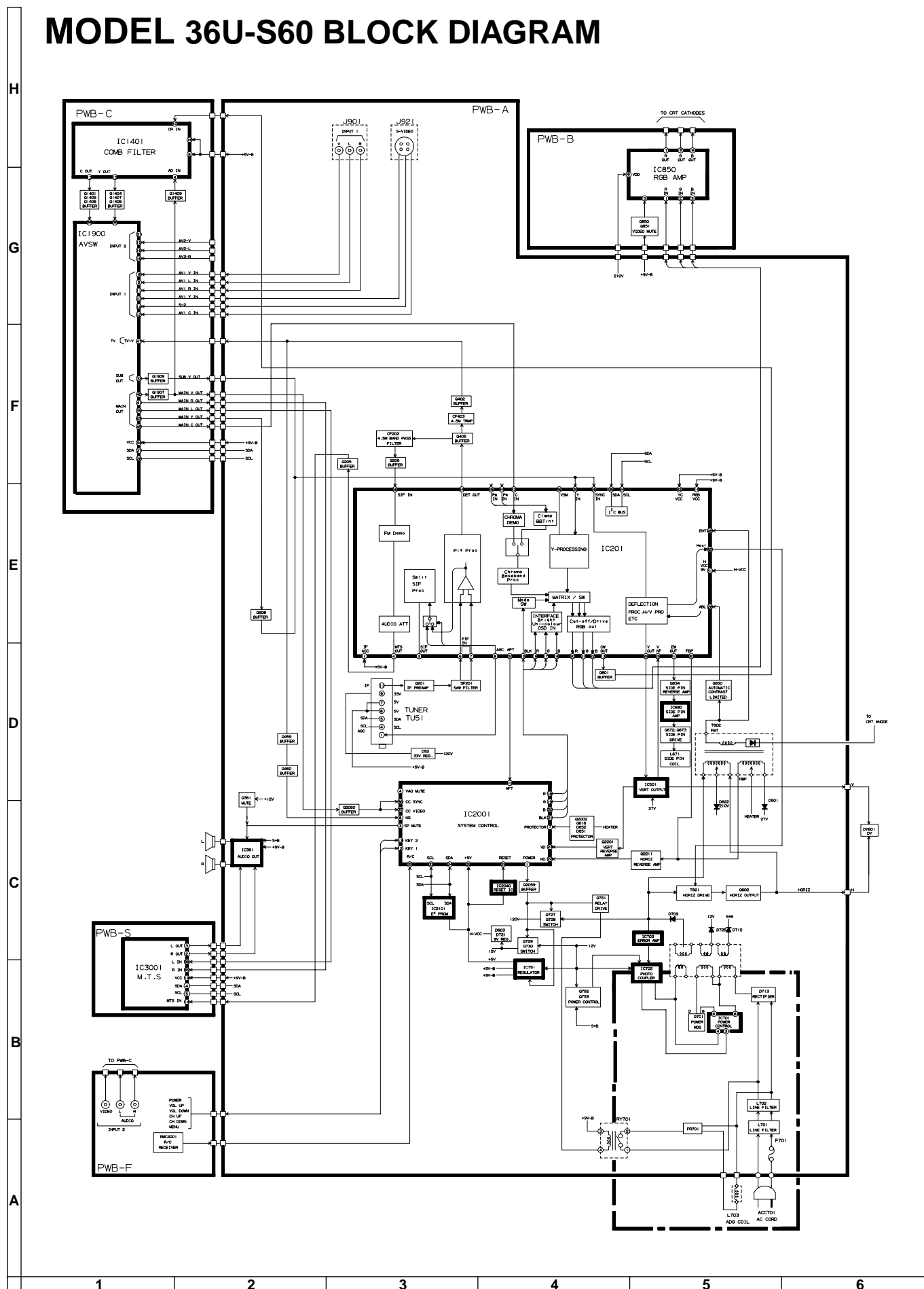




# MODELS 32U-S50/60 BLOCK DIAGRAM



# MODEL 36U-S60 BLOCK DIAGRAM



# DESCRIPTION OF SCHEMATIC DIAGRAM

## NOTES:

1. The unit of resistance "ohm" is omitted.  
( $K=k\Omega=1000\Omega$ ,  $M=M\Omega$ )
2. All resistors are 1/8 watt, unless otherwise noted.
3. All capacitors are  $\mu F$ , unless otherwise noted.  
( $P=pF=\mu\mu F$ )
4. (G) indicates  $\pm 2\%$  tolerance may be used.
5.  $\overline{\text{---}}$  indicates line isolated ground.

## VOLTAGE MEASUREMENT CONDITIONS:

1. All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.
2. All voltages measured with 1000 $\mu$  V B & W or Color signal.

## WAVEFORM MEASUREMENT CONDITIONS:

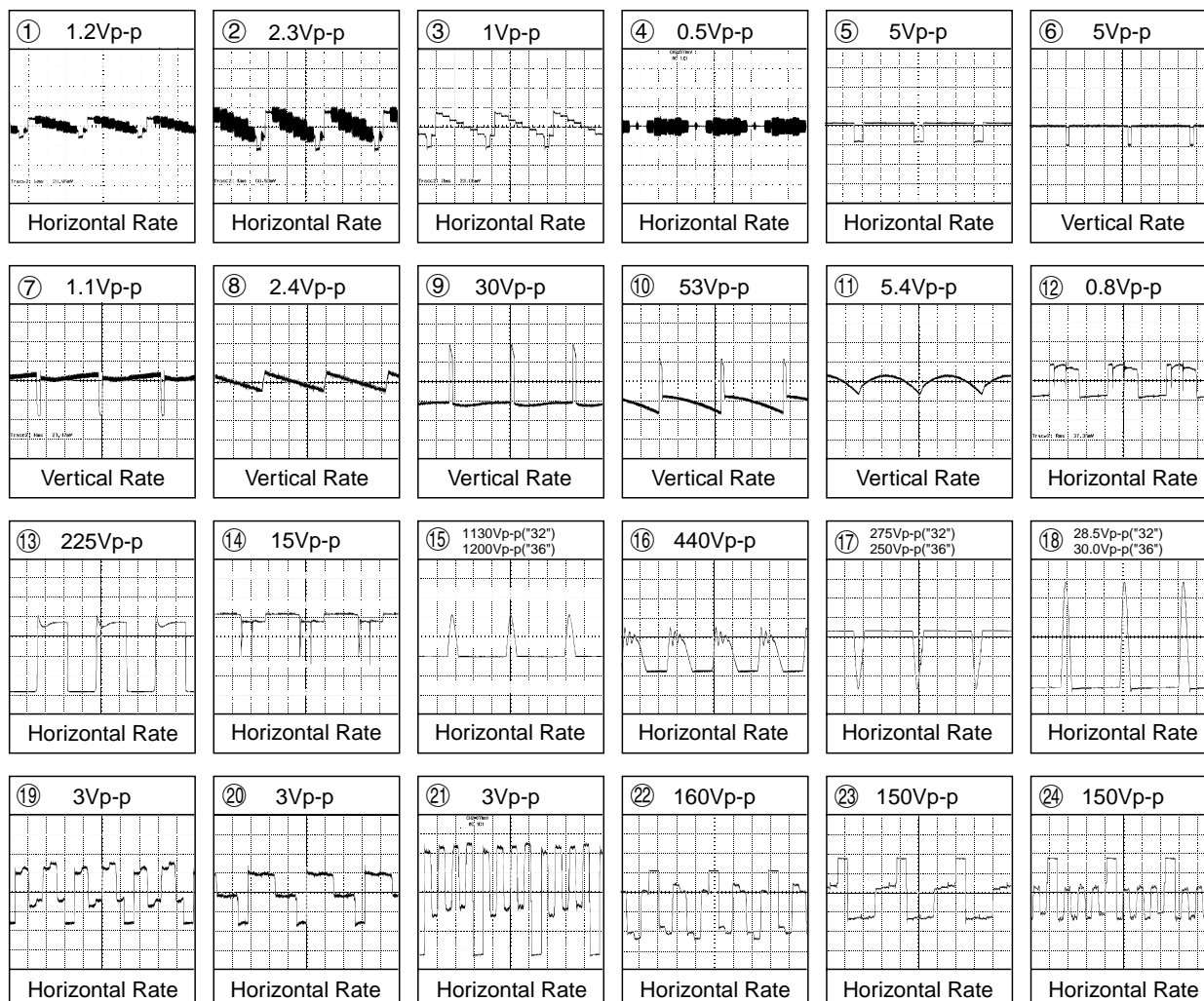
1. Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.
2.  $\odot$  indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)

$\triangle$  AND SHADED (  ) COMPONENTS = SAFETY RELATED PARTS.

$\blacktriangle$  MARK= X-RAY RELATED PARTS.

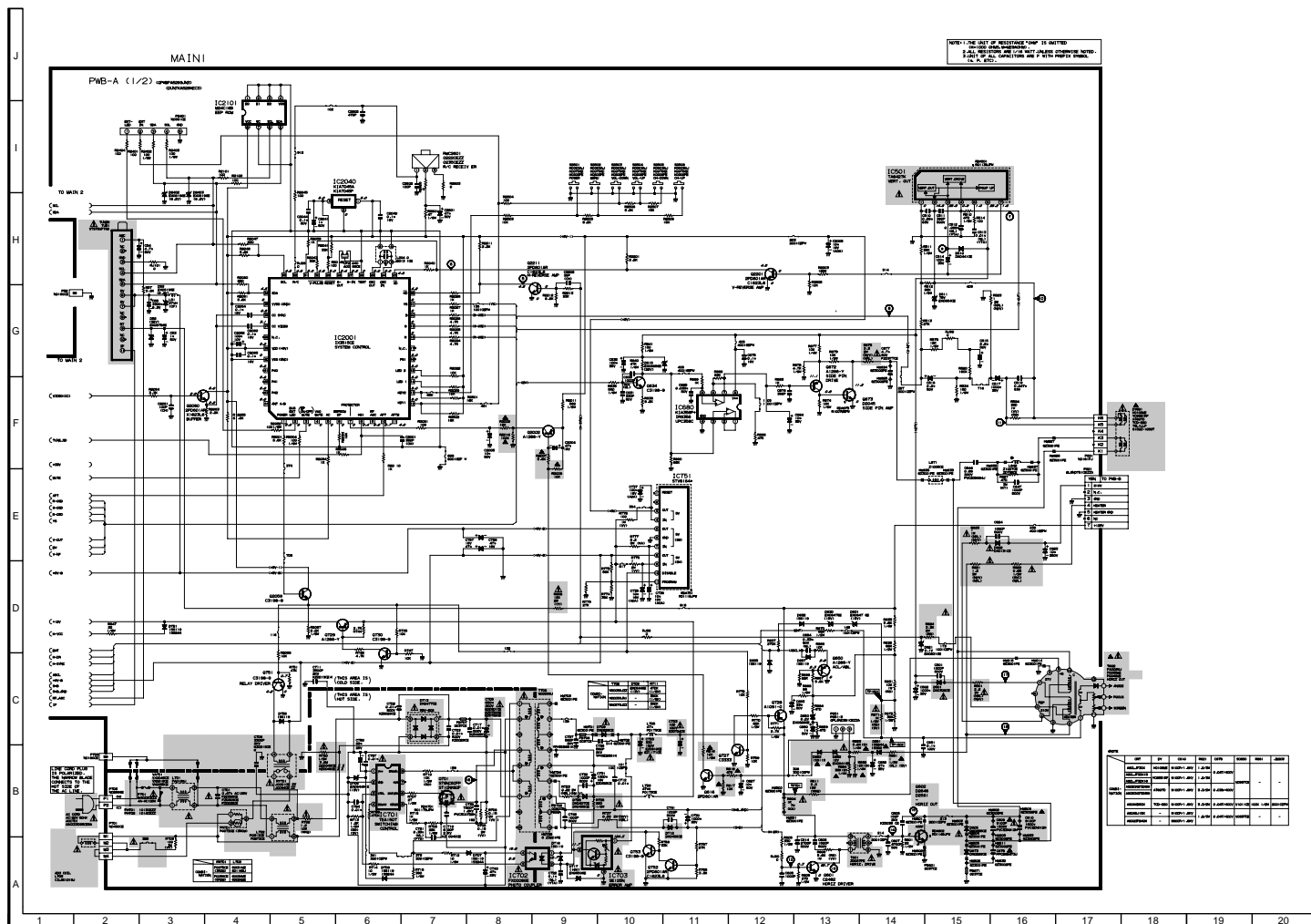
This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

# WAVEFORMS



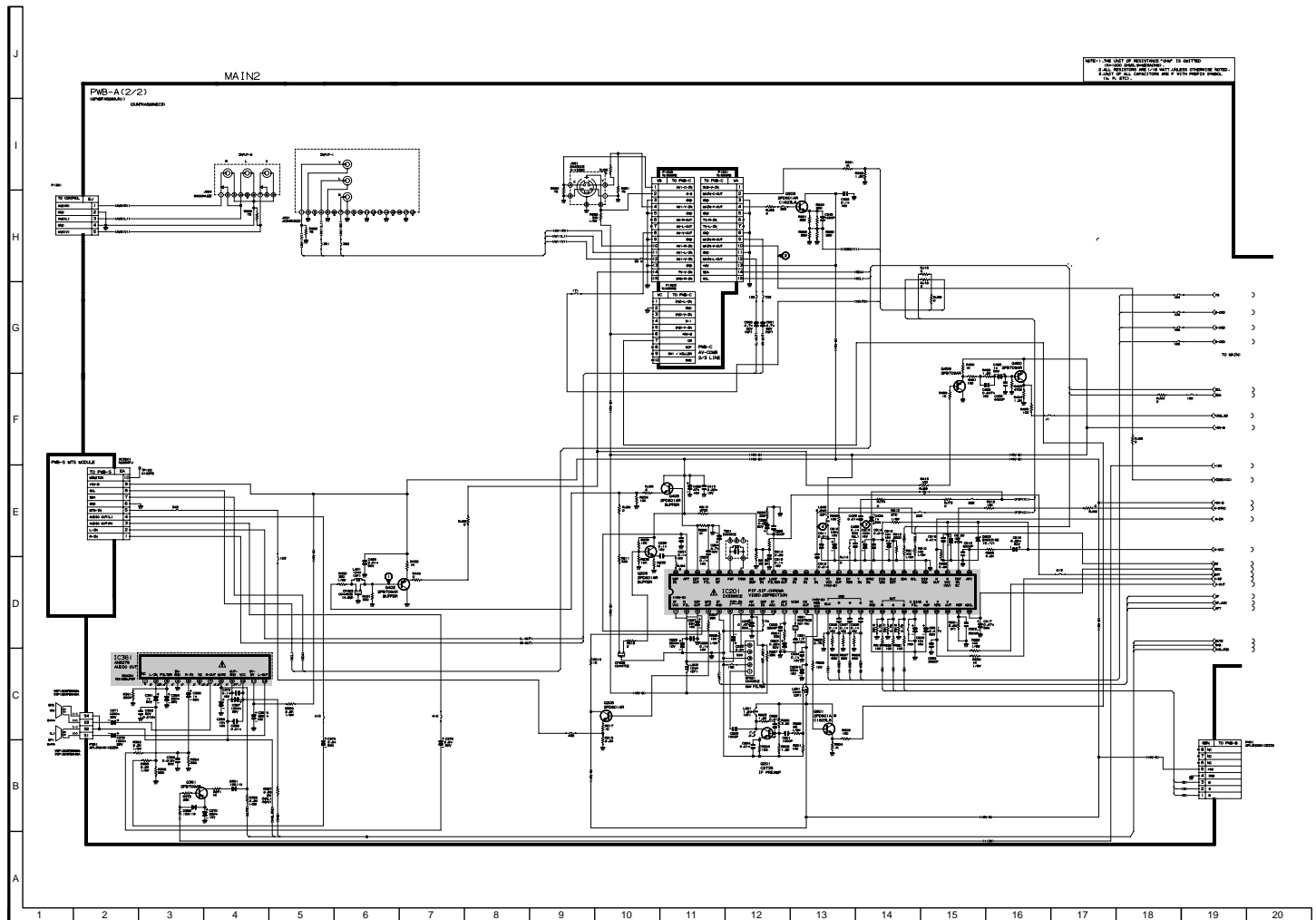


# MODEL 32U-S50 SCHEMATIC DIAGRAM: MAIN-1 Unit

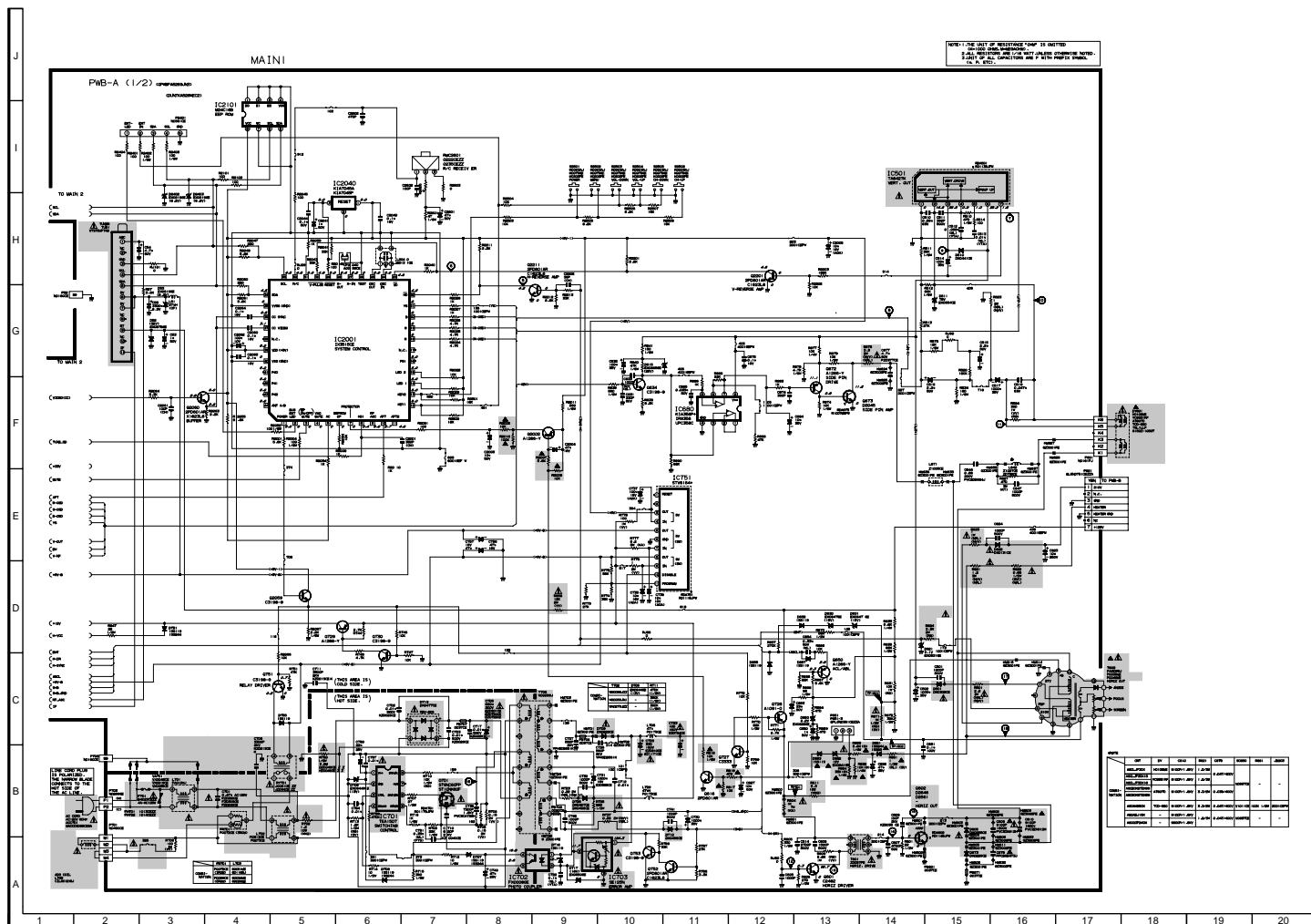




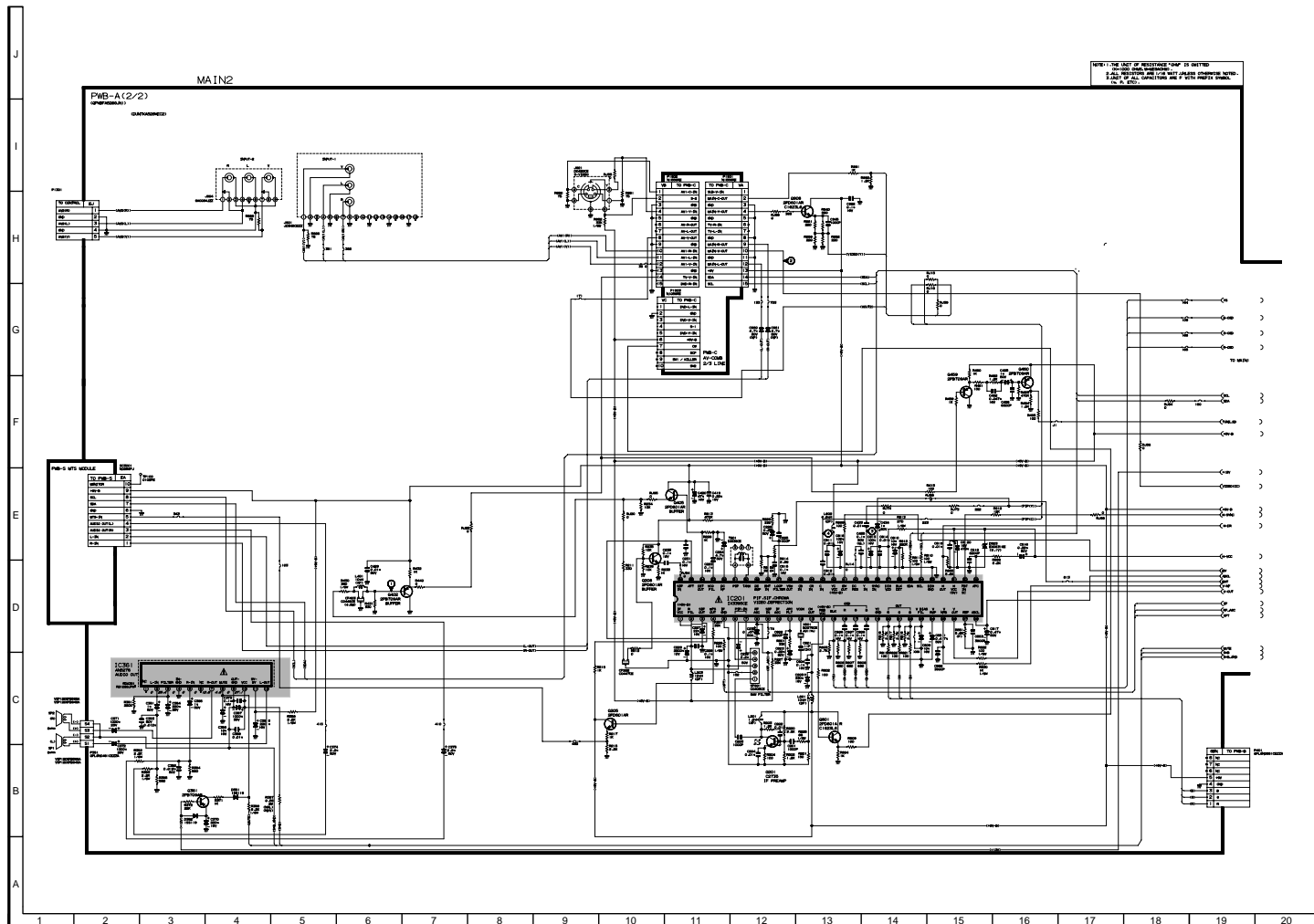
### MODEL 32U-S50 SCHEMATIC DIAGRAM: MAIN-2 Unit



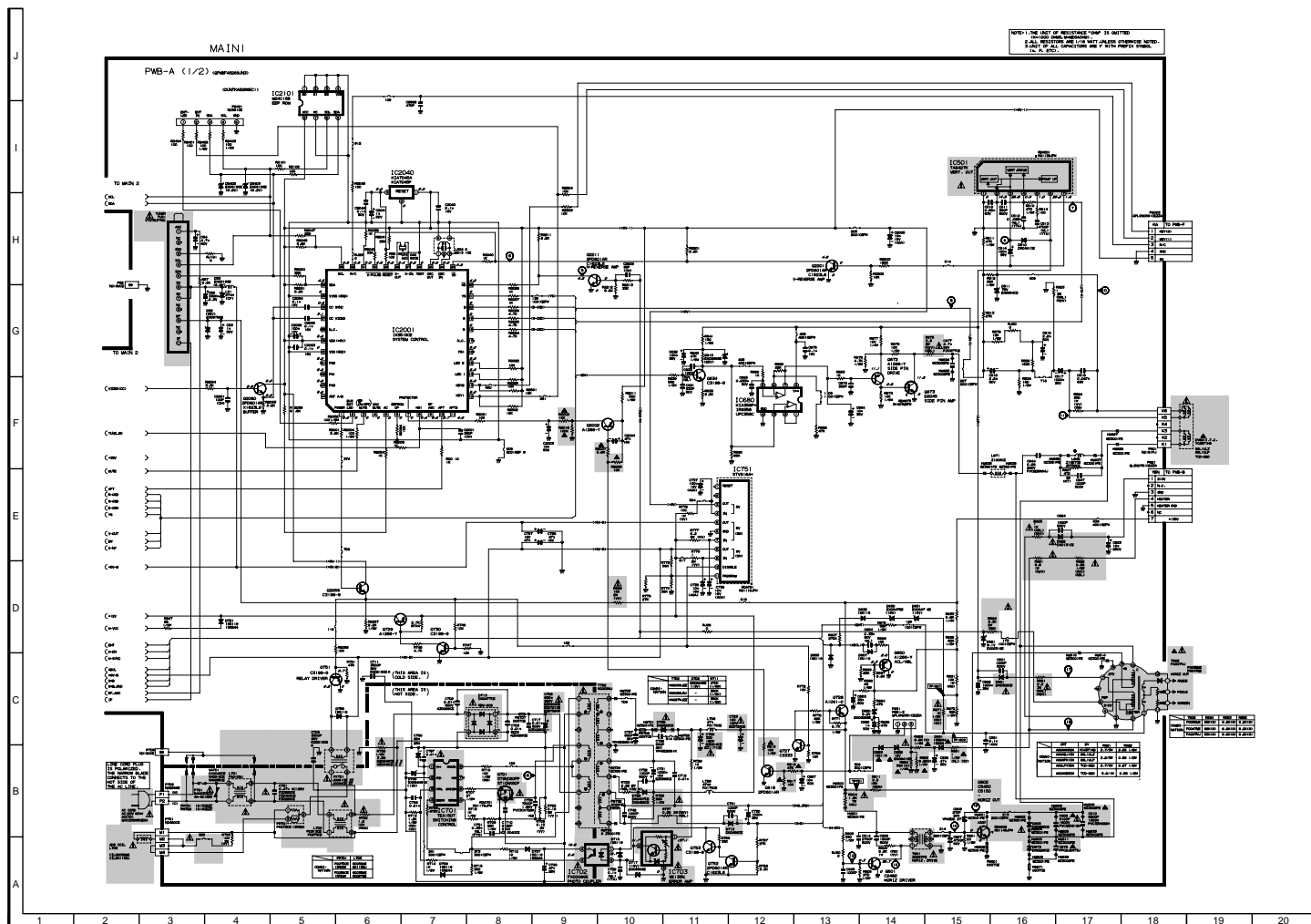
### MODEL 32U-S60 SCHEMATIC DIAGRAM: MAIN-1 Unit



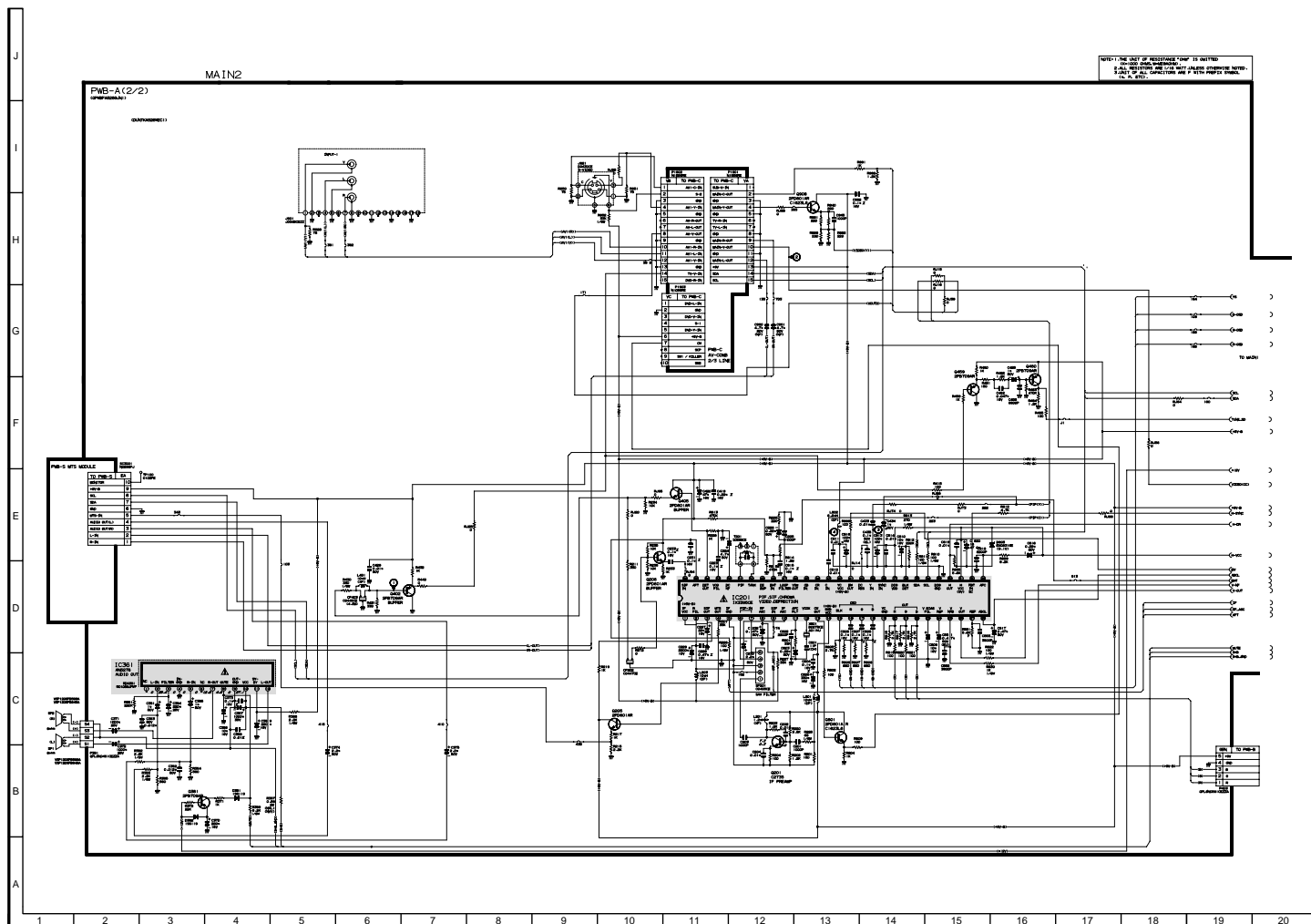
### MODEL 32U-S60 SCHEMATIC DIAGRAM: MAIN-2 Unit



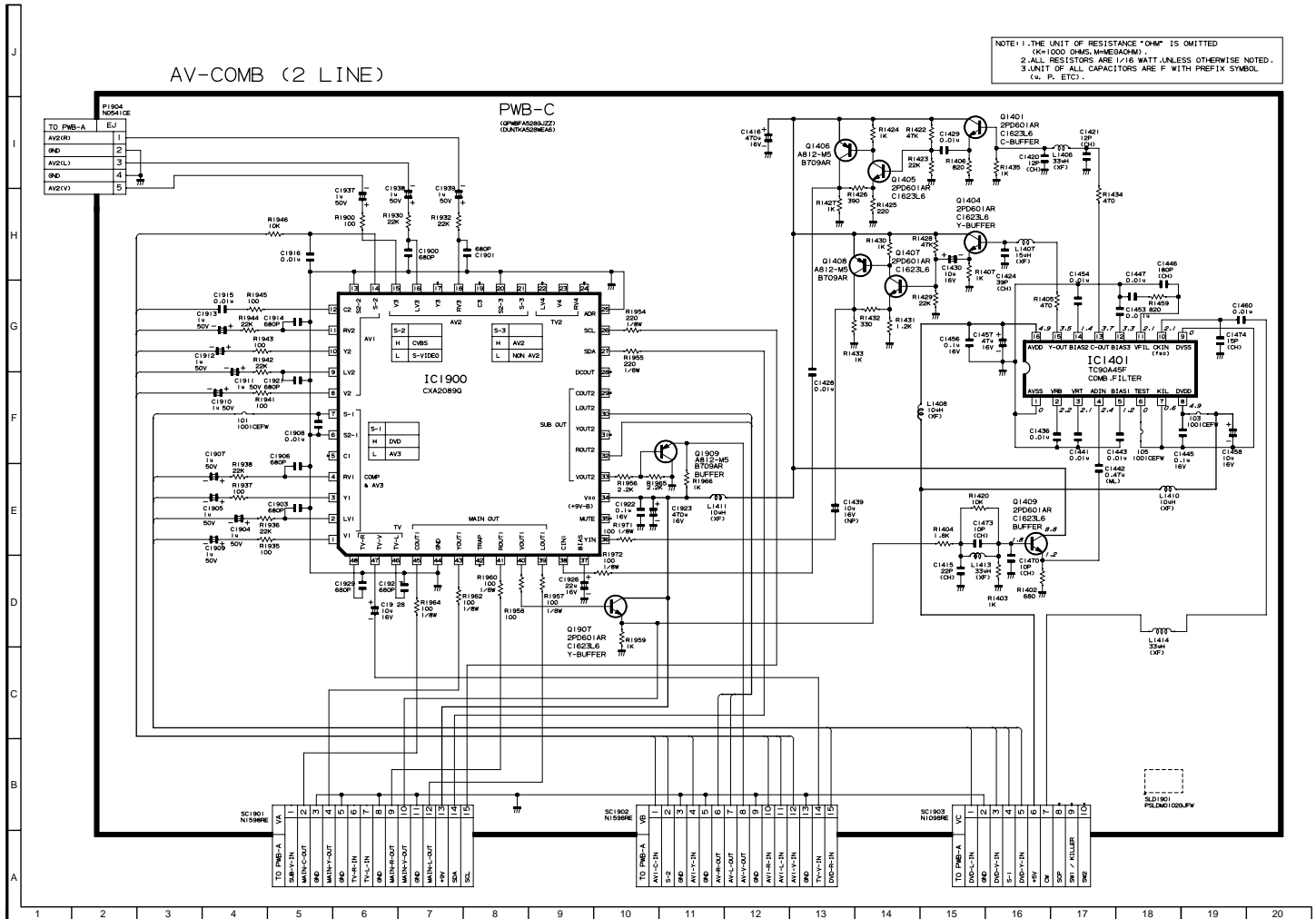
# MODEL 36U-S60 SCHEMATIC DIAGRAM: MAIN-1 Unit



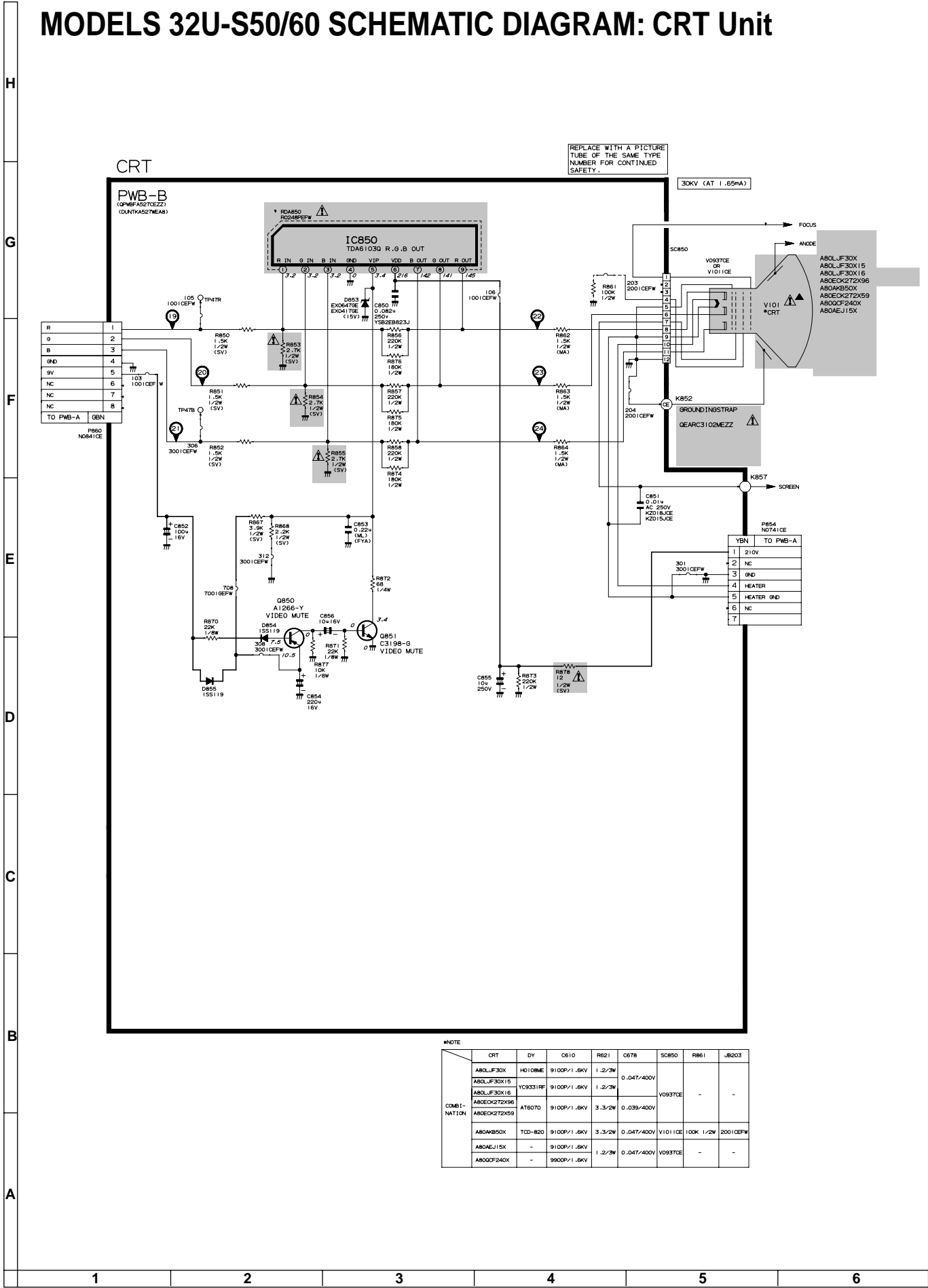
# MODEL 36U-S60 SCHEMATIC DIAGRAM: MAIN-2 Unit



### MODELS 32U-S50/60, 36U-S60 SCHEMATIC DIAGRAM: AV Unit



# MODELS 32U-S50/60 SCHEMATIC DIAGRAM: CRT Unit







A

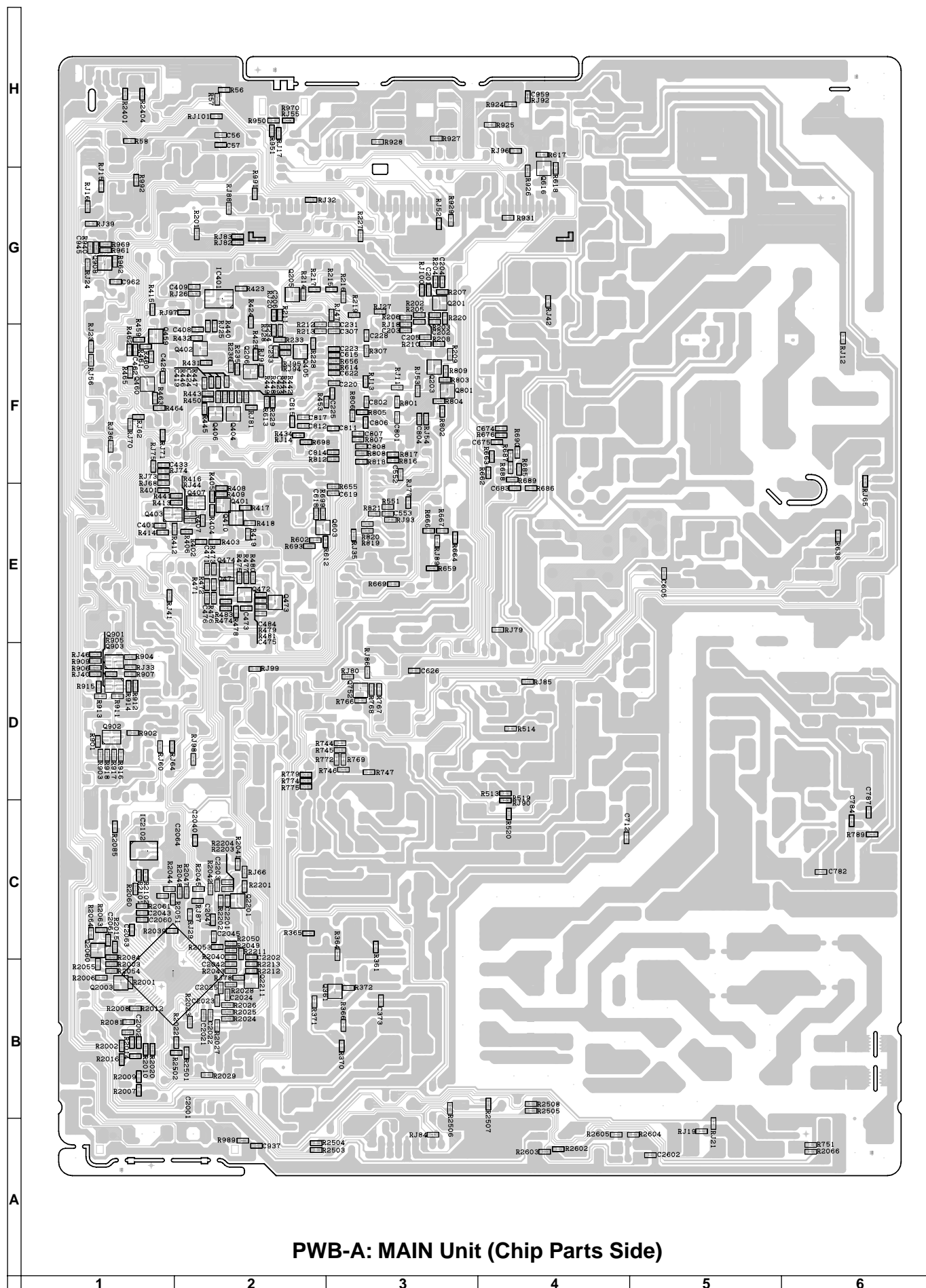
# MTS MODULE







1	2	3	4	5	6
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PWB-A: MAIN Unit (Chip Parts Side)









# PARTS LIST

## PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual; electrical components having such features are identified by  $\Delta$  and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does not have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

### "HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

in **USA**: Contact your nearest SHARP Parts Distributor to order.  
For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

▲ MARK : X- RAY RELATED PARTS

Ref. No.	Part No.	★	Description	Code
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## PICTURE TUBE

### 32U-S50, 32U-S60

▲ $\Delta$ V101	VB80LJF3015*S	X	Picture Tube	CT
$\Delta$ L703	RCiLG0121GJZZ	X	Degaussing Coil	AU
	LHLDW0102GJKZ	X	ADG Coil Holder	AC
	MSPRT0002MEZZ	X	Spring for CRT	AF
$\Delta$	QEARC3102MEZZ	X	Grounding Strap	AG

	CRT	DY	C610	R621	C678	SC850	R861	JB203
COMBINATION	AB0LJF30X	HD108ME	9100P/1.6KV	1.2/3W	0.04T/400V			
	AB0LJF30X15	YC9331RF	9100P/1.6KV	1.2/3W				
	AB0LJF30X16				V093TCE	-	-	
	AB0E0K272X96	AT6070	9100P/1.6KV	3.3/2W	0.039/400V			
	AB0E0K272X59							
	AB0AKB50X	TCD-820	9100P/1.6KV	3.3/2W	0.04T/400V	V1011CE	100K 1/2W	2001CEPW
	AB0AEJ15X	-	9100P/1.6KV	1.2/3W	0.04T/400V	V093TCE	-	-
	AB00CF240X	-	9900P/1.6KV	1.2/3W	0.04T/400V	V093TCE	-	-

### 36U-S60

▲ $\Delta$ V101	VB90AKB50X/1E	X	Picture Tube	DB
$\Delta$ L703	RCiLG0119GJZZ	X	Degaussing Coil	AT
	or			
	RCiLG0052MEZZ			
	LHLDW0102GJKZ	X	ADG Coil Holder	AC
	MSPRT0002MEZZ	X	Spring for CRT	AF
$\Delta$	QEARC3502MEZZ	X	Grounding Strap	AG

	CRT	DY	R621	R622
COMBINATION	A90AHF50X06	YC43T1HB	2.7/3W	0.56 1/2W
	A90AEJ15X09	89L1ULZ	2.2/3W	0.56 1/2W
	A90AF15X13	89L1ULP		
	A90LPY30X05	TCD-820	2.7/3W	0.2T 1/2W
	A90AKB50X03	TCD-820	5.6/1W	0.56 1/2W

Ref. No.	Part No.	★	Description	Code
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## PRINTED WIRING BOARD ASSEMBLIES (NOT REPLACEMENT ITEM)

PWB-A DUNTKA526WEC3	-	MAIN Unit(32U-S50)	—
PWB-A DUNTKA526WEC2	-	MAIN Unit(32U-S60)	—
PWB-A DUNTKA526WEC1	-	MAIN Unit(36U-S60)	—
PWB-B DUNTKA527WEA8	-	CRT Unit (32U-S50, 32U-S60)	—
PWB-B DUNTKA527WEB3	-	CRT Unit(36U-S60)	—
PWB-C DUNTKA528WEA6	-	AV Unit	—
PWB-F DUNTKB207WEA0	-	CONTROL Unit(36U-S60)	—
PWB-S DUNTKA070WEV3	-	MTS MODULE Unit	—

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>PWB-A: DUNTKA526WEC3(32U-S50)</b>									
<b>PWB-A: DUNTKA526WEC2(32U-S60)</b>									
<b>PWB-A: DUNTKA526WEC1(36U-S60)</b>									
<b>MAIN UNIT</b>									
<b>TUNER</b>									
<b>NOTE: THE PARTS HERE SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.</b>									
△ TU51	VTUVTST5UF740	X	Tuner	AX	Q2060	VS2PD601AR/-1*	J	D601AR	AB
<b>INTEGRATED CIRCUITS</b>									
△ IC201	RH-iX3395CEN2	J	TB1252CN	AY		or			
△ IC361	VHiAN5276//-1	J	AN5276	AR		VS2PX1623L61E*			
△ IC501	VHiTA8427K/-1	J	TA8427K	AL	Q2201	VS2PD601AR/-1*	J	D601AR	AB
IC680	VHiKiA358P+-1	X	KIA358P	AF		or			
	or					VS2PC1623L61E*			
	VHiIR9358//-1				Q2211	VS2PD601AR/-1*	J	D601AR	AB
	or					or			
	VHiUPC358C/-1					VS2PC1623L61E*			
△ IC701	VHiTEA1507/-1	J	TEA1507P/N1	AL	<b>DIODES</b>				
△ IC702	RH-FX0008GEZZ	J	PC123FY8	AE	D52	RH-EX0676GEZZ*	J	Zener Diode, 32V	AA
△ IC703	VHiSE125N//-1	X	SE125N	AK	D53	RH-EX0619GEZZ*	J	Zener Diode, 6.2V	AA
			(32U-S50, 32U-S60)		D361	VHD1SS119//-1*	J	Diode	AB
△ IC703	VHiSE135N//-1	J	SE135N	AG	D362	VHD1SS119//-1*	J	Diode	AB
			(36U-S60)		△ D501	RH-DX0302CEZZ*	J	Diode	AC
IC751	VHiSTV8164+-1	X	I.C.	AM	D510	RH-DX0441CEZZ*	J	Diode	AC
IC2001	RH-iX3515CEN2	X	TMPA8700CPF-3F	AT	D511	RH-EX0654CEZZ*	J	Zener Diode, 75V	AD
IC2040	VHiKiA7045A-1	J	KIA7045AP	AE	D603	RH-EX0631GEZZ*	J	Zener Diode, 9.1V	AA
	or				△ D605	RH-DX0255CEZZ	J	Diode	AC
	VHiKiA7045P-1				D615	RH-EX0665GEZZ*	J	Zener Diode, 25V	AA
IC2101	VHiM24C16B/-1	J	M24C16-BN6	AG	D621	RH-EX0631GEZZ*	J	Zener Diode, 9.1V	AA
<b>TRANSISTORS</b>					△ D622	RH-DX0131CEZZ*	J	Diode	AC
Q201	VS2SC2735//1E*	J	C2735	AC	D650	RH-EX0628GEZZ*	J	Zener Diode, 8.2V	AC
Q205	VS2PD601AR/-1*	J	D601AR	AB	▲ △ D651	VHD1SS244//-1*	J	Diode	AB
Q206	VS2PD601AR/-1*	J	D601AR	AB		or			
Q361	VS2PB709AR/-1*	J	B709AR	AB		VHD1SS82///1A*			
Q402	VS2PB709AR/-1*	J	B709AR	AB	▲ △ D652	RH-EX0641GEZZ*	J	Zener Diode, 12V	AA
Q405	VS2PD601AR/-1*	J	D601AR	AB	▲ △ D653	VHD1SS119//-1*	J	Diode	AB
Q459	VS2PB709AR/-1*	J	B709AR	AB	D657	VHD1SS119//-1*	J	Diode	AB
Q460	VS2PB709AR/-1*	J	B709AR	AB	△ D673	RH-DX0229CEZZ	J	Diode	AF
Q601	VS2SC2482//-1+	J	C2482	AD	D706	RH-EX0644GEZZ*	J	Zener Diode, 13V	AB
△ Q602	VS2SD2646++1E+	X	D2646++	AP	D707	VHD1SS119//-1*	J	Diode	AB
	or		(32U-S50, 32U-S60)			or			
	VS2SC5150++1E+					VHD1SS244//-1*			
	or				D708	VHD1SS119//-1*	J	Diode	AB
△ Q602	VS2SD2581++2E+					or			
	VS2SC5450++1E	X	C5450++	AP		VHD1SS244//-1*			
	or		(36U-S60)		△ D709	RH-DX0229CEZZ	J	Diode	AF
	VS2SC5150++1E				△ D712	RH-DX0468CEZZ	J	Diode	AE
Q616	VS2PD601AR/-1*	J	D601AR	AB	△ D713	RH-DX0477CEZZ	J	Diode	AF
Q634	VS2SC3198-G-1+	J	C3198-G	AA	D716	VHD1SS119//-1*	J	Diode	AB
Q650	VS2SA1266-Y-1+	J	A1266-Y	AA	D717	RH-EX0650GEZZ*	J	Zener Diode, 16V	AB
Q672	VS2SA1266-Y-1+	J	A1266-Y	AA	D721	VHD1SS119//-1*	J	Diode	AB
Q673	VS2SD2045//-1	J	D2045	AL		or			
△ Q701	VSST9NC60FP1E+	X	ST9NC60FP	AP		VHD1SS244//-1*			
	or				△ D725	RH-DX0407CEZZ*	J	Diode	AD
	VSST10NK60F1E+					or			
Q727	VS2SC3333//-1+	J	C3333	AG		RH-DX0468CEZZ			
Q728	VS2SA1091-O1A+	J	A1091-O	AA	D755	VHD1SS119//-1*	J	Diode	AB
Q729	VS2SA1266-Y-1+	J	A1266-Y	AA	D2402	RH-EX0619GEZZ*	J	Zener Diode, 6.2V	AA
Q730	VS2SC3198-G-1+	J	C3198-G	AA	D2403	RH-EX0619GEZZ*	J	Zener Diode, 6.2V	AA
Q751	VS2SC3198-G-1+	J	C3198-G	AA	△ VA701	RH-VX0019CEZZ	J	Varistor	AC
Q752	VS2PD601AR/-1*	J	D601AR	AB		or			
	or					RH-VX0048CEZZ			
	VS2PC1623L61E*					or			
Q753	VS2SC3198-G-1+	J	C3198-G	AA		RH-VX0035CEZZ			
Q801	VS2PD601AR/-1*	J	D601AR	AB	<b>PACKAGED CIRCUITS</b>				
	or				△ PR701	RMPTP0072CEZZ	J	Packaged Circuit	AH
	VS2PC1623L61E*				X801	RCRSAA011WJZZ	X	Crystal	AG
Q908	VS2PD601AR/-1*	J	D601AR	AB		or			
	or					RCRSB0278CEZZ			
	VS2PC1623L61E*				<b>FILTERS AND COILS</b>				
Q2002	VS2SA1266-Y-1+	J	A1266-Y	AA	CF202	RFiLC0447CEZZ	J	Ceramic Filter	AD
Q2059	VS2SC3198-G-1+	J	C3198-G	AA	CF403	RFiLC0446CEZZ	J	Ceramic Filter	AD
					CF2040	RFiLA0099CEZZ+	J	Ceramic Filter	AE
					L51	VP-CF100K0000*	J	Peaking 10μH	AB
					L201	VP-XF1R2K0000*	J	Peaking 1.2μH	AB
					L203	VP-DF100K0000*	J	Peaking 10μH	AB
					L401	VP-XF100K0000*	J	Peaking 10μH	AB
					L642	RCiLZ1027CEZZ	X	Coil	AH
						or			
						RCiLZ0798CEZZ			

Ref. No.	Part No.	★	Description	Code
<b>PWB-A: DUNTKA526WEC3(32U-S50)</b>				
<b>PWB-A: DUNTKA526WEC2(32U-S60)</b>				
<b>PWB-A: DUNTKA526WEC1(36U-S60)</b>				
<b>MAIN UNIT (Continued)</b>				
L671	RCiLZ1005CEZZ	J	Coil	AH
△ L701	RCiLFA010WJZZ	X	Coil	AK
△ L702	RCiLF0313CEZZ	J	Coil	AH
	or			
	RCiLF0273CEZZ			
L705	RCiLP0179CEZZ+	J	Coil	AD
L729	RCiLP0179CEZZ+	J	Coil	AD
L801	VP-DF100K0000*	J	Peaking 10μH	AB
L802	VP-DF6R8K0000*	J	Peaking 6.8μH	AB
L2040	RCiLB0131CEZZ	J	Oscillation Coil	AE
SF201	RFiLC0405CEZZ	J	SAW Filter	AH

**32U-S50/60**

	PR701	L703
COMBI-NATION	P0072CE (3ROM)	G0051ME G0118GJ
	P0059CE (5ROM)	G0034ME G0028ME

**36U-S60**

	PR701	L703
COMBI-NATION	P0072CE (3ROM)	G0052ME G0119GJ
	P0059CE (5ROM)	G0035ME G0027ME

**TRANSFORMERS**

T201	RCiLi0636CEZZ	X	IF Coil	AH
△ T601	RTRNZ0057PEZZ	R	Transformer	AK
▲ △ T602	RTRNFA006WJZZ	X	H-Volt Transformer	AY
	or		(32U-S50, 32U-S60)	
	RTRNF0035MEZZ			
	or			
	RTRNF0046MEZZ			
▲ △ T602	RTRNFA007WJZZ	X	H-Volt Transformer	AY
	or		(36U-S60)	
	RTRNF0036MEZZ			
	or			
	RTRNF0047MEZZ			
△ T702	RTRNW0005GJZZ	X	Transformer	AP
	or			
	RTRNW0005GJN1			

**32U-S50/60, 36U-S60**

	T702	D706	R711
COMBI-NATION	W0005GJZZ	EX0644GE (13V)	470K (1/8W)
	W0005GJN1	-	390K (1/8K)
	WA027WJZZ	-	390K (1/8W)

**CAPACITORS***[EL... Electrolytic]*

C53	VCEA0A1HW105M+J	1.0	50V	EL.	AB
C54	VCEA0A1HW475M+J	4.7	50V	EL.	AB
C55	VCEA0A0JW228M+J	2200	6.3V	EL.	AD
			(32U-S50, 32U-S60)		
C55	VCEA0A1AW228M+J	2200	10V	EL.	AD
			(36U-S60)		
C201	VCKYCY1HB102K*J	1000p	50V	Ceramic	AA
C202	VCKYCY1HB103K*J	0.01	50V	Ceramic	AA
C203	VCKYCY1HB102K*J	1000p	50V	Ceramic	AA
C204	VCKYCY1HB103K*J	0.01	50V	Ceramic	AA
C223	VCKYCY1CF104Z*J	0.1	16V	Ceramic	AA
C224	VCEA0A1HW475M+J	4.7	50V	EL.	AB
C225	VCKYCY1HB102K*J	1000p	50V	Ceramic	AA
C226	VCEA0A1HW224M+J	0.22	50V	EL.	AB
C227	VCEA0A1CW226M+J	22	16V	EL.	AB
C228	VCKYCY1CF104Z*J	0.1	16V	Ceramic	AA
C229	VCEA0A1AW228M+J	2200	10V	EL.	AD

C230	VCEA0A1HW225M+J	2.2	50V	EL.	AB
C231	VCKYCY1CF104Z*J	0.1	16V	Ceramic	AA
C232	VCEA0A1HW474M+J	0.47	50V	EL.	AB
C233	VCKYCY1CF104Z*J	0.1	16V	Ceramic	AA
C361	VCEA0A1HW105M+J	1.0	50V	EL.	AB
C362	VCQYTA1HM123J+J	0.012	50V	Mylar	AA
C363	VCQYTA1HM123J+J	0.012	50V	Mylar	AA
C364	VCEA0A1EW227M+J	220	25V	EL.	AB
C365	VCEA0A1HW105M+J	1.0	50V	EL.	AB
C366	VCEA0A1CW106M+J	10	16V	EL.	AB
C367	VCEA0A1VW108M+J	1000	35V	EL.	AD
C368	VCKYPA1HF103Z+J	0.01	50V	Ceramic	AA
C369	VCEA0A1CW227M+J	220	16V	EL.	AC
C370	VCEA0A1CW227M+J	220	16V	EL.	AC
C371	VCEA0A1EW108M+J	1000	25V	EL.	AD
C372	VCEA0A1EW108M+J	1000	25V	EL.	AD
C373	VCKYCY1CF104Z*J	0.1	16V	Ceramic	AA
C374	VCEA0A1HW225M+J	2.2	50V	EL.	AB
C375	VCEA0A1HW225M+J	2.2	50V	EL.	AB
C419	VCKYCY1CF224Z*J	0.22	16V	Ceramic	AA
C420	VCEA0A1CW476M+J	47	16V	EL.	AB
C425	VCEA0A1HW105M+J	1.0	50V	EL.	AB
C426	VCKYCY1HB682K*J	6800p	50V	Ceramic	AA
C429	VCQYTA1HM103J+J	0.01	50V	Mylar	AA
C433	VCKYCY1HB103K*J	0.01	50V	Ceramic	AA
C434	VCEA0A1HW105M+J	1.0	50V	EL.	AB
C435	VCQYTA1HM104J+J	0.1	50V	Mylar	AA
C462	VCKYCY1CB473K*J	0.047	16V	Ceramic	AA
C501	VCKYPA2HB102K+J	1000p	500V	Ceramic	AA
C502	VCEA0A1VW108M+J	1000	35V	EL.	AD
C510	VCFYSA1JB564J+J	0.56	63V	M-Poly.	AE
C511	VCKYPA2HB391K+J	390p	500V	Ceramic	AA
C512	VCQYTA1HM683J+J	0.068	50V	Mylar	AB
C513	VCQYTA1HM103J+J	0.01	50V	Mylar	AA
			(32U-S50, 32U-S60)		
C513	VCQYTA1HM472J+J	4700p	50V	Mylar	AB
			(36U-S60)		
C514	VCEA0A1VW107M+J	100	35V	EL.	AC
C515	VCEACA1HC225J+J	2.2	50V	EL.	AC
C516	VCEACA1HC225J+J	2.2	50V	EL.	AC
C517	VCEA0A1VW108M+J	1000	35V	EL.	AD
C519	VCFYSA1JB473J+J	0.047	63V	Mylar	AC
C551	VCEA0A1HW474M+J	0.47	50V	EL.	AB
C552	VCKYCY1HB392K*J	3900p	50V	Ceramic	AA
C553	VCKYCY1HB392K*J	3900p	50V	Ceramic	AA
C605	VCKYCY1HB102K*J	1000p	50V	Ceramic	AA
C606	VCKYPA2HB561K+J	560p	500V	Ceramic	AA
C607	VCKYPA1HB472K+J	4700p	50V	Ceramic	AA
C608	RC-KZ0033CEZZ	150p	2kV	Ceramic	AB
			(32U-S50, 32U-S60)		
C608	VCKYPH3DB271K	270p	2kV	Ceramic	AC
			(36U-S60)		
▲ △ C609	VCFPVC3ZA912H	9100p	1.8kV	M-Poly.	AE
▲ △ C610	VCFPVC3ZA912H	9100p	1.8kV	M-Poly.	AE
			(32U-S50, 32U-S60)		
▲ △ C610	VCFPVC3ZA822H	8200p	1.8kV	M-Poly.	AE
			(36U-S60)		
C614	VCKYPA2HB272K+J	2700p	500V	Ceramic	AA
C615	VCKYCY1CF104Z*J	0.1	16V	Ceramic	AA
C616	VCEA0A1HW224M+J	0.22	50V	EL.	AB
C617	VCEA0A1HW474M+J	0.47	50V	EL.	AB
C618	VCKYCY1HB822K*J	8200p	50V	Ceramic	AB
C619	VCKYCY1HB103K*J	0.01	50V	Ceramic	AA
C620	VCEA0A1CW477M+J	470	16V	EL.	AC
C623	VCEA4A2EN106M+J	10	250V	EL.	AD
C624	VCKYPA2HB102K+J	1000p	500V	Ceramic	AA
C627	VCEA0A1HW106M+J	10	50V	EL.	AB
C631	VCKYPA1HB331K+J	330p	50V	Ceramic	AA
C632	VCEA0A1VW107M+J	100	35V	EL.	AC
C633	VCKYPA1HB102K+J	1000p	50V	Ceramic	AA
C644	VCFPVC2DB684J	0.68	200V	M-Poly.	AG
C647	VCKYPA2HB102K+J	1000p	500V	Ceramic	AA
C650	VCEA0A1HW105M+J	1.0	50V	EL.	AB
C651	VCQYTA2AA104K+J	0.1	100V	Mylar	AB
C652	VCEA0A1VW476M+J	47	35V	EL.	AB

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>PWB-A: DUNTKA526WEC3(32U-S50)</b>					C813	VCEA0A1CW107M+J	100	16V EL.	AC
<b>PWB-A: DUNTKA526WEC2(32U-S60)</b>					C814	VCKYCY1HB103K*J	0.01	50V Ceramic	AA
<b>PWB-A: DUNTKA526WEC1(36U-S60)</b>					C816	VCEA0A1CW107M+J	100	16V EL.	AC
<b>MAIN UNIT (Continued)</b>					C945	VCKYCY1HB102K*J	1000p	50V Ceramic	AA
C653	VCEA0A1HW336M+J	33	50V EL.	AB	C960	VCE9GA1HW475M+J	4.7	50V EL. (N.P)	AB
C654	VCIFYA1HA334J+ J	0.33	50V M-Poly.	AB	C961	VCE9GA1HW475M+J	4.7	50V EL. (N.P)	AB
C674	VCCCCY1HH391J*J	390p	50V Ceramic	AA	C962	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA
C675	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA	C2001	VCCCCY1HH331J*J	330p	50V Ceramic	AA
C677	RC-FZ0377CEZZ	J	4.7 50V Mylar	AF	C2003	VCEA0A1HW106M+J	10	50V EL.	AB
▲▲ C678	VCQPPC2GB473J	J	0.047 400V M-Poly.	AB	C2004	VCEA0A1CW476M+J	47	16V EL.	AB
			(32U-S50, 32U-S60)		C2005	VCEA0A1CW106M+J	10	16V EL.	AB
▲▲ C678	VCQPPC2JB473J	J	0.047 630V M-Poly.	AC	C2040	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA
			(36U-S60)		C2041	VCEA0A1HW105M+J	1.0	50V EL.	AB
C683	VRS-CY1JF000J	J	00 1/16W M-Ox.	AA	C2042	VCCCCY1HH101J*J	100p	50V Ceramic	AA
C684	VCEA0A1VW106M+J	10	35V EL.	AB	C2044	VCQYTA1HM104J+ J	0.1	50V Mylar	AA
C685	VCQYTA1HM333J+ J	0.033	50V Mylar	AA	C2060	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA
▲ C701	RC-FZ038SCEZZ	J	0.47 AC125V Plastic	AE	C2061	VCCCCY1HH101J*J	100p	50V Ceramic	AA
	or				C2062	VCEA0A1AW107M+J	100	10V EL.	AB
	RC-FZ030SCEZZ				C2063	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA
	or				C2064	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA
	RC-FZ022SCEZZ				C2201	VCKYCY1HB681K*J	680p	50V Ceramic	AA
C702	RC-KZ0029CEZZ+	J	0.01 500V Ceramic	AC	C2202	VCCCCY1HH390J*J	39p	50V Ceramic	AA
C703	RC-KZ0029CEZZ+	J	0.01 500V Ceramic	AC	C2601	VCEA0A1HW476M+J	47	50V EL.	AB
▲ C705	RC-EZ0720CEZZ	J	680 200V EL.	AN				(32U-S50, 32U-S60)	
	or				C2602	VCCCCY1HH101J*J	100p	50V Ceramic	AA
	RC-EZ0801CEZZ								
	or				<b>RESISTORS</b>				
	RC-EZ0722CEZZ				<i>[M-Ox.... Metal Oxide]</i>				
▲ C705	RC-EZ0722CEZZ	J	820 200V EL.	AR	RJ13	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
	or				RJ14	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
	RC-EZ0802CEZZ				RJ15	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
	or				RJ16	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
	RC-EZ0721CEZZ				RJ17	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
▲ C706	RC-KZ021SCEZZ	J	3300p 2kV Ceramic	AE	RJ20	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C710	RC-KZ0040CEZZ	J	820p 2kV Ceramic	AD	RJ25	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C711	RC-KZ021SCEZZ	J	3300p 2kV Ceramic	AE	RJ27	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C712	VCKYCY1HB103K*J	0.01	50V Ceramic	AA	RJ28	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C717	RC-KZ0029CEZZ+	J	0.01 500V Ceramic	AC	RJ32	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C722	VCQYTA1HM104J+ J	0.1	50V Mylar	AA	RJ35	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
▲ C723	RC-EZ0724CEZZ	J	100 160V EL.	AG	RJ39	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
▲ C725	RC-EZ0810CEZZ	J	330 160V EL.	AH	RJ41	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
	or				RJ47	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
	RC-EZ1171CEZZ				RJ52	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C726	VCKYPH3DB561K	J	560p 2kV Ceramic	AC	RJ53	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C727	VCKYPH3DB561K	J	560p 2kV Ceramic	AC	RJ54	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C730	VCEA4A1VN108M+ J	1000	35V EL.	AD	RJ55	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C731	RC-EZ0385CEZZ	J	1000 16V EL.	AE	RJ56	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C732	VCKYPA2HB102K+ J	1000p	500V Ceramic	AA	RJ60	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C735	VCEA0A1CW106M+J	10	16V EL.	AB	RJ65	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C736	VCEA0A1CW106M+J	10	16V EL.	AB	RJ66	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C737	VCEA0A1CW107M+J	100	16V EL.	AC	RJ68	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C738	VCFPVC3CA722H J	7200p	1.6kV M-Poly.	AF	RJ73	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C740	VCEA0A1EW476M+J	47	25V EL.	AB	RJ74	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C741	VCKYPA2HB102K+ J	1000p	500V Ceramic	AA	RJ77	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C742	VCKYPA2HB102K+ J	1000p	500V Ceramic	AA	RJ78	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C744	VCEA0A0JW107M+ J	100	6.3V EL.	AB	RJ79	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C756	VCEA0A1CW476M+J	47	16V EL.	AB	RJ80	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C757	VCEA0A1CW476M+J	47	16V EL.	AB	RJ81	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C780	VCEA9M1EW226M+J	22	25V EL.	AB	RJ82	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C781	VCIFYA1HA334J+ J	0.33	50V Mylar	AB	RJ83	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C784	VCKYCY1HF103Z*J	0.01	50V Ceramic	AA	RJ84	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C787	VCKYCY1HF103Z*J	0.01	50V Ceramic	AA	RJ86	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C801	VCCCCY1HH110J*J	11p	50V Ceramic	AA	RJ88	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C802	VCKYCY1HB222K*J	J	2200p 50V Ceramic	AA	RJ90	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C803	VCEA0A1HW224M+J	0.22	50V EL.	AB	RJ94	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C804	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA	RJ95	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C805	VCEA0A1CW337M+J	330	16V EL.	AC	RJ97	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C806	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA	RJ98	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C807	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA	RJ101	VRS-CY1JF000J*J	J	00 1/16W M-Ox.	AA
C808	VCKYCY1CF104Z*J	0.1	16V Ceramic	AA	R57	VRS-CY1JF392J*J	J	3.9k 1/16W M-Ox.	AA
C809	VCEA0A1CW106M+J	10	16V EL.	AB	R201	VRS-CY1JF151J*J	J	150 1/16W M-Ox.	AA
C810	VCEA0A1CW106M+J	10	16V EL.	AB	R202	VRS-CY1JF122J*J	J	1.2k 1/16W M-Ox.	AA
C811	VCKYCY1HB103K*J	0.01	50V Ceramic	AA	R203	VRS-CY1JF122J*J	J	1.2k 1/16W M-Ox.	AA
C812	VCKYCY1HB103K*J	0.01	50V Ceramic	AA	R204	VRS-CY1JF101J*J	J	100 1/16W M-Ox.	AA
					R211	VRS-CY1JF331J*J	J	330 1/16W M-Ox.	AA



Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code	
PWB-A: DUNTKA526WEC3(32U-S50)					△ R621	VRN-RL3AB5R6J+	X	5.6 1W	M-Film	
PWB-A: DUNTKA526WEC2(32U-S60)					△ R622	VRN-RL2HCR68J+	X	(36U-S60) 0.68 1/2W	M-Film	
PWB-A: DUNTKA526WEC1(36U-S60)					△ R622	VRN-RL2HCR56J+	X	(32U-S50, 32U-S60) 0.56 1/2W	M-Film	
MAIN UNIT (Continued)					△ R623	VRN-RL3AB1R0J+	X	(36U-S60) 1.0 1W	M-Film	
R212	VRS-CY1JF000J*	J	00 1/16W	M-Ox.	AA	△ R624	VRS-RG3DB332J+	X	3.3k 2W	M-Ox.
R215	VRS-CY1JF222J*	J	2.2k 1/16W	M-Ox.	AA	R625	VRD-RA2BE102J*	J	1.0k 1/8W	Carbon
R217	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.	AA	R627	VRS-KT3LB471J	J	470 3.0W	M-Ox.
R219	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.	AA	R631	VRS-RG3AB103J+	J	10k 1W	M-Ox.
R220	VRS-CY1JF392J*	J	3.9k 1/16W	M-Ox.	AA	R633	VRD-RA2EE562J*	J	5.6k 1/4W	Carbon
R225	VRD-RA2BE680J*	J	68 1/8W	Carbon	AA	R635	VRD-RA2EE683J*	J	68k 1/4W	Carbon
R226	VRD-RA2BE101J*	J	100 1/8W	Carbon	AB	R638	VRS-CY1JF822J*	J	8.2k 1/16W	M-Ox.
R227	VRS-CY1JF333J*	J	33k 1/16W	M-Ox.	AA	R639	VRD-RA2BE561J*	J	560 1/8W	Carbon
R228	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.	AA	R640	VRD-RA2BE473J*	J	47k 1/8W	Carbon
R229	VRS-CY1JF221J*	J	220 1/16W	M-Ox.	AA	R641	VRD-RA2BE151J*	J	150 1/8W	Carbon
R233	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.	AA	R647	VRD-RM2HD220J*	J	22 1/2W	Carbon
R234	VRS-CY1JF103J*	J	10k 1/16W	M-Ox.	AA	▲△ R651	VRN-RL2HC1R0J+	X	1.0 1/2W	M-Film
R235	VRS-CY1JF103J*	J	10k 1/16W	M-Ox.	AA	▲△ R652	VRD-RA2EE103G*	J	10k 1/4W	Carbon
R236	VRS-CY1JF103J*	J	10k 1/16W	M-Ox.	AA				(32U-S50, 32U-S60)	
R307	VRS-CY1JF333J*	J	33k 1/16W	M-Ox.	AA	▲△ R652	VRD-RA2EE822G*	J	8.2k 1/4W	Carbon
R361	VRS-CY1JF224J*	J	220k 1/16W	M-Ox.	AA				(36U-S60)	
R362	VRD-RA2BE222J*	J	2.2k 1/8W	Carbon	AA	▲△ R653	VRD-RA2EE562G*	J	5.6k 1/4W	Carbon
R363	VRD-RA2BE222J*	J	2.2k 1/8W	Carbon	AA				(32U-S50, 32U-S60)	
R364	VRS-CY1JF561J*	J	560 1/16W	M-Ox.	AA	▲△ R653	VRD-RA2EE682G*	J	6.8k 1/4W	Carbon
R365	VRS-CY1JF561J*	J	560 1/16W	M-Ox.	AA				(36U-S60)	
R367	VRN-RL3DBR56J+	X	0.56 2W	M-Film	AE	▲△ R654	VRD-RA2EE333G*	X	33k 1/4W	Carbon
R368	VRD-RA2BE222J*	J	2.2k 1/8W	Carbon	AA				(32U-S50, 32U-S60)	
R369	VRD-RA2BE822J*	J	8.2k 1/8W	Carbon	AA	▲△ R654	VRD-RA2EE563G*	J	56k 1/4W	Carbon
R370	VRS-CY1JF122J*	J	1.2k 1/16W	M-Ox.	AA				(36U-S60)	
R371	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.	AA	R655	VRS-CY1JF562J*	J	5.6k 1/16W	M-Ox.
R372	VRS-CY1JF223J*	J	22k 1/16W	M-Ox.	AA	R656	VRS-CY1JF224J*	J	220k 1/16W	M-Ox.
R415	VRS-CY1JF101J*	J	100 1/16W	M-Ox.	AA	△ R658	VRS-VV3DB123J	J	12k 2W	M-Ox.
R430	VRD-RA2BE331J*	J	330 1/8W	Carbon	AA				(32U-S50, 32U-S60)	
R431	VRS-CY1JF331J*	J	330 1/16W	M-Ox.	AA	△ R658	VRS-VV3DB153J	J	15k 2W	M-Ox.
R432	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.	AA				(36U-S60)	
R440	VRS-CY1JF000J*	J	00 1/16W	M-Ox.	AA	R659	VRS-CY1JF471J*	J	470 1/16W	M-Ox.
R459	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.	AA	R662	VRS-CY1JF000J*	J	00 1/16W	M-Ox.
R460	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.	AA	R663	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.
R461	VRS-CY1JF151J*	J	150 1/16W	M-Ox.	AA	R664	VRS-CY1JF471J*	J	470 1/16W	M-Ox.
R462	VRS-CY1JF122J*	J	1.2k 1/16W	M-Ox.	AA	R666	VRS-CY1JF223J*	J	22k 1/16W	M-Ox.
R463	VRS-CY1JF474J*	J	470k 1/16W	M-Ox.	AA	R667	VRS-CY1JF562J*	J	5.6k 1/16W	M-Ox.
R464	VRS-CY1JF122J*	J	1.2k 1/16W	M-Ox.	AA	R668	VRD-RA2BE680J*	J	68 1/8W	Carbon
R465	VRS-CY1JF101J*	J	100 1/16W	M-Ox.	AA	R669	VRS-CY1JF103J*	J	10k 1/16W	M-Ox.
△ R501	VRN-RL3LB2R2J+	X	2.2 3.0W	M-Film	AF	R670	VRD-RM2HD563J*	J	56k 1/2W	Carbon
R510	VRD-RA2BE471J*	J	470 1/8W	Carbon	AA	△ R671	VRS-RG2HC102J+	J	1.0k 1/2W	M-Ox.
R511	VRD-RA2BE393J*	J	39k 1/8W	Carbon	AA	R672	VRD-RM2HD393J*	J	39k 1/2W	Carbon
			(32U-S50, 32U-S60)			R674	VRD-RA2BE103J*	J	10k 1/8W	Carbon
R511	VRD-RA2BE473J*	J	47k 1/8W	Carbon	AA	△ R675	VRN-RL3DB3R3J+	X	3.3 2W	M-Film
			(36U-S60)			R677	VRD-RA2EE103J*	J	10k 1/4W	Carbon
R512	VRD-RA2BE683J*	J	68k 1/8W	Carbon	AA	R678	VRD-RA2BE472J*	J	4.7k 1/8W	Carbon
R513	VRS-CY1JF273J*	J	27k 1/16W	M-Ox.	AA	R679	VRD-RM2HD103J*	J	10k 1/2W	Carbon
R514	VRS-CY1JF101J*	J	100 1/16W	M-Ox.	AA	R686	VRS-CY1JF473J*	J	47k 1/16W	M-Ox.
R520	VRS-CY1JF184J*	J	180k 1/16W	M-Ox.	AA	R688	VRS-CY1JF223J*	J	22k 1/16W	M-Ox.
R523	VRN-RL3DB1R0J+	X	1.0 2W	M-Film	AE	R689	VRS-CY1JF102J*	J	1.0k 1/16W	M-Ox.
R524	VRS-RG3AB391J+	X	390 1W	M-Ox.	AE	R690	VRS-CY1JF683J*	J	68k 1/16W	M-Ox.
R534	VRD-RA2BE181J*	J	180 1/8W	Carbon	AA	R698	VRS-CY1JF101J*	J	100 1/16W	M-Ox.
R551	VRS-CY1JF562F*	J	5.6k 1/16W	M-Ox.	AA	R699	VRS-CY1JF562J*	J	5.6k 1/16W	M-Ox.
R578	VRD-RA2BE123J*	J	12k 1/8W	Carbon	AA	△ R702	VRW-KQ4AC1R2K	J	1.2 10W	Cement
R601	VRD-RM2HD220J*	J	22 1/2W	Carbon	AA	△ R703	VRS-VV3LB101J	J	100 3.0W	M-Ox.
△ R604	VRS-KA3NG102J	J	1.0k 7.0W	M-Ox.	AD	R705	VRN-VV3DBR15J	J	0.15 2W	M-Film
			(32U-S50, 32U-S60)			R706	VRN-VV3DBR15J	J	0.15 2W	M-Film
△ R604	VRS-KA3NG182J	X	1.8k 7.0W	M-Ox.	AF	R707	VRD-RM2HD270J*	J	27 1/2W	Carbon
			(36U-S60)			R709	VRD-RA2BE223J*	J	22k 1/8W	Carbon
R605	VRD-RM2HD331J*	J	330 1/2W	Carbon	AA	R710	VRS-RG2HC102J+	J	1.0k 1/2W	M-Ox.
R606	VRD-RM2HD271J*	J	270 1/2W	Carbon	AA	R712	VRD-RA2BE100J*	J	10 1/8W	Carbon
R609	VRS-RG3AB562J+	X	5.6k 1W	M-Ox.	AE	R713	VRS-RG2HC122J+	X	1.2k 1/2W	M-Ox.
△ R611	VRW-KQ41C3R3K	J	3.3 15W	Cement	AG	R714	VRD-RM2HD100J*	J	10 1/2W	Carbon
R612	VRS-CY1JF472J*	J	4.7k 1/16W	M-Ox.	AA	R715	VRD-RA2BE391J*	J	390 1/8W	Carbon
R613	VRS-CY1JF474J*	J	470k 1/16W	M-Ox.	AA	R718	VRD-RA2BE102J*	J	1.0k 1/8W	Carbon
R614	VRS-CY1JF395J*	J	3.9M 1/16W	M-Ox.	AA	R723	VRN-RL3DBR22J+	J	0.22 2W	M-Film
▲ R616	VRD-RA2BE103J*	J	10k 1/8W	Carbon	AA	△ R725	VRD-RM2HD821J*	J	820 1/2W	Carbon
▲ R617	VRS-CY1JF103J*	J	10k 1/16W	M-Ox.	AA	R726	VRD-RM2HD102J*	J	1.0k 1/2W	Carbon
▲ R618	VRS-CY1JF473J*	J	47k 1/16W	M-Ox.	AA				(36U-S60)	
△ R621	VRN-RL3LB1R2J+	X	1.2 3.0W	M-Film	AF					
			(32U-S50, 32U-S60)							

Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
PWB-A: DUNTKA526WEC3(32U-S50)					R2029	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA
PWB-A: DUNTKA526WEC2(32U-S60)					R2039	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
PWB-A: DUNTKA526WEC1(36U-S60)					R2040	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
MAIN UNIT (Continued)					R2041	VRS-CY1JF333J*	J	33k 1/16W M-Ox.	AA
△ R737	VRN-RL3DBR56J+	X	0.56 2W M-Film	AE	R2042	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
R744	VRS-CY1JF272J*	J	2.7k 1/16W M-Ox.	AA	R2043	VRS-CY1JF333J*	J	33k 1/16W M-Ox.	AA
R745	VRS-CY1JF472J*	J	4.7k 1/16W M-Ox.	AA	R2046	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
R746	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA	R2047	VRS-CY1JF221J*	J	220 1/16W M-Ox.	AA
R747	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA	R2048	VRS-CY1JF562J*	J	5.6k 1/16W M-Ox.	AA
△ R750	RR-DZ0049CEZZ*	J	3.9M 1/2W Solid	AB	R2052	VRD-RA2BE101J*	J	100 1/8W Carbon	AB
	or				R2054	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
	RR-HZ0048CEZZ*				R2055	VRS-CY1JF682J*	J	6.8k 1/16W M-Ox.	AA
R751	VRS-CY1JF473J*	J	47k 1/16W M-Ox.	AA	R2060	VRS-CY1JF221J*	J	220 1/16W M-Ox.	AA
R766	VRS-CY1JF333J*	J	33k 1/16W M-Ox.	AA	R2061	VRS-CY1JF562J*	J	5.6k 1/16W M-Ox.	AA
R767	VRS-CY1JF273J*	J	27k 1/16W M-Ox.	AA	R2063	VRS-CY1JF222J*	J	2.2k 1/16W M-Ox.	AA
R768	VRS-CY1JF332J*	J	3.3k 1/16W M-Ox.	AA	R2064	VRS-CY1JF332J*	J	3.3k 1/16W M-Ox.	AA
R769	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA	R2066	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA
R770	VRD-RM2HD823J*	J	82k 1/2W Carbon	AA	R2067	VRD-RA2BE222J*	J	2.2k 1/8W Carbon	AA
R771	VRD-RA2BE272J*	J	2.7k 1/8W Carbon	AA	R2081	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
R772	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA	R2084	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA
R774	VRS-CY1JF393J*	J	39k 1/16W M-Ox.	AA	R2101	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
R775	VRS-CY1JF563J*	J	56k 1/16W M-Ox.	AA	R2102	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
R776	VRN-VV3DB1R0J	J	1.0 2W M-Film	AB	R2201	VRS-CY1JF222J*	J	2.2k 1/16W M-Ox.	AA
R777	VRS-KA3HG8R2K	J	8.2 5W M-Ox.	AD	R2202	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA
R778	VRS-VV3AB101J	J	100 1W M-Ox.	AA	R2203	VRS-CY1JF184J*	J	180k 1/16W M-Ox.	AA
R779	VRS-CY1JF273J*	J	27k 1/16W M-Ox.	AA	R2211	VRS-CY1JF222J*	J	2.2k 1/16W M-Ox.	AA
△ R789	VRS-CY1JF474J*	J	470k 1/16W M-Ox.	AA	R2212	VRS-CY1JF682J*	J	6.8k 1/16W M-Ox.	AA
R801	VRS-CY1JF333J*	J	33k 1/16W M-Ox.	AA	R2213	VRS-CY1JF333J*	J	33k 1/16W M-Ox.	AA
R802	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA	R2401	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
R804	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA	R2402	VRD-RA2BE101J*	J	100 1/8W Carbon	AB
R805	VRS-CY1JF272J*	J	2.7k 1/16W M-Ox.	AA	R2403	VRD-RA2BE101J*	J	100 1/8W Carbon	AB
R806	VRS-CY1JF681J*	J	680 1/16W M-Ox.	AA	R2404	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
R807	VRS-CY1JF681J*	J	680 1/16W M-Ox.	AA	R2501	VRS-CY1JF183J*	J	18k 1/16W M-Ox.	AA
R808	VRS-CY1JF681J*	J	680 1/16W M-Ox.	AA	R2502	VRS-CY1JF183J*	J	18k 1/16W M-Ox.	AA
R809	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA	R2503	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA
R810	VRD-RA2BE101J*	J	100 1/8W Carbon	AB	R2504	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA
R811	VRD-RA2BE101J*	J	100 1/8W Carbon	AB	R2505	VRS-CY1JF822J*	J	8.2k 1/16W M-Ox.	AA
R812	VRS-CY1JF224J*	J	220k 1/16W M-Ox.	AA				(32U-S50, 32U-S60)	
R813	VRD-RA2BE271J*	J	270 1/8W Carbon	AA	R2506	VRS-CY1JF822J*	J	8.2k 1/16W M-Ox.	AA
R816	VRS-CY1JF272J*	J	2.7k 1/16W M-Ox.	AA				(32U-S50, 32U-S60)	
R817	VRS-CY1JF272J*	J	2.7k 1/16W M-Ox.	AA	R2507	VRS-CY1JF183J*	J	18k 1/16W M-Ox.	AA
R818	VRS-CY1JF272J*	J	2.7k 1/16W M-Ox.	AA				(32U-S50, 32U-S60)	
R819	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA	R2508	VRS-CY1JF183J*	J	18k 1/16W M-Ox.	AA
R820	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA				(32U-S50, 32U-S60)	
R821	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA	R2601	VRD-RA2BE470J*	J	47 1/8W Carbon	AA
R822	VRD-RA2BE101J*	J	100 1/8W Carbon	AB				(32U-S50, 32U-S60)	
R830	VRD-RA2BE102J*	J	1.0k 1/8W Carbon	AA	R2603	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
R928	VRS-CY1JF750J*	J	75 1/16W M-Ox.	AA				(32U-S50, 32U-S60)	
R940	VRS-CY1JF221J*	J	220 1/16W M-Ox.	AA	R2605	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
R950	VRS-CY1JF750J*	J	75 1/16W M-Ox.	AA				(32U-S50, 32U-S60)	
R951	VRS-CY1JF750J*	J	75 1/16W M-Ox.	AA	MISCELLANEOUS PARTS				
R952	VRD-RA2BE333J*	J	33k 1/8W Carbon	AA	S2501	QSW-K0003AJZZ+	J	POWER	AB
R961	VRS-CY1JF221J*	J	220 1/16W M-Ox.	AA		or		(32U-S50, 32U-S60)	
R962	VRS-CY1JF221J*	J	220 1/16W M-Ox.	AA		QSW-K0079GEZZ+			
R969	VRS-CY1JF221J*	J	220 1/16W M-Ox.	AA		or			
R989	VRS-CY1JF750J*	J	75 1/16W M-Ox.	AA		QSW-K0202PEZZ+			
			(32U-S50, 32U-S60)		S2502	QSW-K0003AJZZ+	J	MENU	AB
R991	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA		or		(32U-S50, 32U-S60)	
R992	VRS-CY1JF122J*	J	1.2k 1/16W M-Ox.	AA		QSW-K0079GEZZ+			
▲ R2001	VRS-CY1JF562J*	J	5.6k 1/16W M-Ox.	AA		or			
▲ R2002	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA		QSW-K0202PEZZ+			
▲ R2004	VRD-RA2BE101J*	J	100 1/8W Carbon	AB	S2503	QSW-K0003AJZZ+	J	VOL-Down	AB
▲ R2007	VRS-CY1JF562J*	J	5.6k 1/16W M-Ox.	AA		or		(32U-S50, 32U-S60)	
▲ R2008	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA		QSW-K0079GEZZ+			
▲ R2009	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA		or			
R2010	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA		QSW-K0202PEZZ+			
R2011	VRD-RA2BE561J*	J	560 1/8W Carbon	AA	S2504	QSW-K0003AJZZ+	J	VOL-Up	AB
▲ R2016	VRS-CY1JF104J*	J	100k 1/16W M-Ox.	AA		or		(32U-S50, 32U-S60)	
R2022	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA		QSW-K0079GEZZ+			
R2024	VRS-CY1JF472J*	J	4.7k 1/16W M-Ox.	AA		or			
R2025	VRS-CY1JF472J*	J	4.7k 1/16W M-Ox.	AA		QSW-K0202PEZZ+			
R2026	VRS-CY1JF472J*	J	4.7k 1/16W M-Ox.	AA	S2505	QSW-K0003AJZZ+	J	CH-Down	AB
R2027	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA		or		(32U-S50, 32U-S60)	
R2028	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA		QSW-K0079GEZZ+			

Ref. No.	Part No.	★	Description	Code
<b>PWB-A: DUNTKA526WEC3(32U-S50)</b>				
<b>PWB-A: DUNTKA526WEC2(32U-S60)</b>				
<b>PWB-A: DUNTKA526WEC1(36U-S60)</b>				
<b>MAIN UNIT (Continued)</b>				
	or			
S2506	QSW-K0202PEZZ+			
	QSW-K0003AJZZ+	J	CH-Up	AB
	or		(32U-S50, 32U-S60)	
	QSW-K0079GEZZ+			
	or			
△ RY701	QSW-K0202PEZZ+			
	RRLYJ0081CEZZ	J	Relay	AL
	or			
△ F701	RRLYJ0094CEZZ			
	QFS-B4023CEZZ	J	Fuse, 4A-AC125V	AC
FB601	RBLN-0037CEZZ*	J	Ferrite Bead	AB
FB671	RBLN-0047CEZZ*	J	Ferrite Bead	AB
FB702	RBLN-0020CEZZ+	J	Ferrite Bead	AB
FB706	RBLN-0037CEZZ*	J	Ferrite Bead	AB
FB707	RBLN-0037CEZZ*	J	Ferrite Bead	AB
FH701	QFSHD1013CEZZ+	J	Fuse Holder	AC
FH702	QFSHD1014CEZZ+	J	Fuse Holder	AC
J901	QTANJ0345CEZZ	X	INPUT IN Terminal	AG
J904	QJAKGA009WJZZ	X	Jack	AG
			(32U-S50, 32U-S60)	
J921	QSODC0430CEZZ	J	Socket, S-Video	AE
P52	QPLGN0160CEZZ	J	Plug, 1-pin(SG)	AB
P361	QPLGN0461CEZZA	J	Plug, 4-pin(S)	AB
P401	QPLGN0861CEZZA	J	Plug, 8-pin(GBN)	AC
			(32U-S50, 32U-S60)	
P403	QPLGN0561CEZZA	J	Plug, 5-pin(GBN)	AB
			(36U-S60)	
P601	QPLGN0161FJZZ	J	Plug, 6-pin(K)	AE
P621	QPLGN0761CEZZA	J	Plug, 7-pin(YBN)	AD
P651	QPLGN0361CEZZA	J	Plug, 3-pin(P651-3)	AB
P701	QPLGN0460CEZZ	J	Plug, 4-pin(M)	AC
P703	QPLGN0269GEZZ	J	Plug, 2-pin(P)	AB
P705	QPLGN0160CEZZ	J	Plug, 1-pin(SG)	AB
P1301	QPLGN0561CEZZA	J	Plug, 5-pin(EJ)	AB
			(32U-S50, 32U-S60)	
P1901	QPLGN1559REZZ	X	Plug, 15-pin(VA)	AF
P1902	QPLGN1559REZZ	X	Plug, 15-pin(VB)	AF
P1903	QPLGN1059REZZ	J	Plug, 10-pin(VC)	AC
P2003	QPLGN0561CEZZA	J	Plug, 5-pin(KA)	AB
			(36U-S60)	
P2401	QPLGN0561CEZZA	J	Plug, 5-pin	AB
SC3001	QSOCN0259FJ00	J	Socket, 10-pin(EA)	AE
RMC2601	RRMCU0222CEZZ	J	Remote Receiver	AL
	or		(32U-S50, 32U-S60)	
	RRMCU0235CEZZ			
RDA361	PRDAR0108GJFW	X	Heat Sink, for IC361	AG
RDA501	PRDAR0113GJFW	X	Heat Sink, for IC501	AH
RDA602	PRDAR0114GJFW	X	Heat Sink, for Q602	AH
RDA673	PRDAR01007MEFW	J	Heat Sink, for Q673	AH
RDA701	PRDAR0117GJFW	X	Heat Sink, for Q701	AL
RDA751	PRDAR0111GJFW	X	Heat Sink, for IC751	AF
	MSPRK0034BMFW	J	Spring	AC
	LHLDW1002PEZZ	R	Holder	AB
	LHLDW1002PEZZ	R	Holder	AB
	LX-BZ3049GEFD	J	Screw	AA
	LX-BZ3049GEFD	J	Screw	AA
	LX-BZ3049GEFD	J	Screw	AA
	LX-BZ3100CEFD	J	Screw	AA
	LX-BZ3100CEFD	J	Screw	AA
	LX-HZ3007MEFD	X	Screw	AB

Ref. No.	Part No.	★	Description	Code
<b>PWB-B: DUNTKA527WEA8(32U-S50, 32U-S60)</b>				
<b>PWB-B: DUNTKA527WEB3(36U-S60)</b>				
<b>CRT UNIT</b>				
<b>INTEGRATED CIRCUIT</b>				
△ IC850	VHiTDA6103Q-1	J	TDA6103Q/N3	AL
<b>TRANSISTORS</b>				
Q850	VS2SA1266-Y-1+	J	A1266-Y	AA
Q851	VS2SC3198-G-1+	J	C3198-G	AA
<b>DIODES</b>				
D853	RH-EX0647GEZZ*	J	Zener Diode, 15V	AA
	or			
	RH-EX0417GEZZ*			
D854	VHD1SS119/-1*	J	Diode	AB
D855	VHD1SS119/-1*	J	Diode	AB
<b>CAPACITORS</b>				
<i>[EL... Electrolytic]</i>				
C850	VCFYSB2EB823J+	J	0.082 250V Mylar	AD
C851	RC-KZ018JCEZZ	J	0.01 AC250V Ceramic	AC
	or			
	RC-KZ015JCEZZ			
C852	VCEA0A1CW227M+J	220	16V EL.	AC
C853	VCFYFA1HA224J+	J	0.22 50V Mylar	AB
C854	VCEA0A1CW227M+J	220	16V EL.	AC
C855	VCEA0A2EW106M+J	10	250V EL.	AD
C856	VCEA0A1CW106M+J	10	16V EL.	AB
<b>RESISTORS</b>				
<i>[M-Ox... Metal Oxide]</i>				
R850	VRS-SV2HC152J	J	1.5k 1/2W M-Ox.	AA
R851	VRS-SV2HC152J	J	1.5k 1/2W M-Ox.	AA
R852	VRS-SV2HC152J	J	1.5k 1/2W M-Ox.	AA
△ R853	VRS-SV2HC272J	J	2.7k 1/2W M-Ox.	AA
△ R854	VRS-SV2HC272J	J	2.7k 1/2W M-Ox.	AA
△ R855	VRS-SV2HC272J	J	2.7k 1/2W M-Ox.	AA
R856	VRD-RM2HD224J*	J	220k 1/2W Carbon	AA
R857	VRD-RM2HD224J*	J	220k 1/2W Carbon	AA
R858	VRD-RM2HD224J*	J	220k 1/2W Carbon	AA
R861	VRD-RM2HD104J*	J	100k 1/2W Carbon	AA
			(36U-S60)	
R862	VRC-MA2HG152K*	J	1.5k 1/2W Solid	AA
R863	VRC-MA2HG152K*	J	1.5k 1/2W Solid	AA
R864	VRC-MA2HG152K*	J	1.5k 1/2W Solid	AA
R867	VRS-SV2HC392J	J	3.9k 1/2W M-Ox.	AA
R868	VRS-SV2HC222J	J	2.2k 1/2W M-Ox.	AA
R870	VRD-RA2BE223J*	J	22k 1/8W Carbon	AA
R871	VRD-RA2BE223J*	J	22k 1/8W Carbon	AA
R872	VRD-RA2EE680J*	J	68 1/4W Carbon	AA
R873	VRD-RM2HD224J*	J	220k 1/2W Carbon	AA
R874	VRD-RM2HD184J*	J	180k 1/2W Carbon	AA
R875	VRD-RM2HD184J*	J	180k 1/2W Carbon	AA
R876	VRD-RM2HD184J*	J	180k 1/2W Carbon	AA
R877	VRD-RA2BE103J*	J	10k 1/8W Carbon	AA
△ R878	VRS-SV2HC120J	J	12 1/2W M-Ox.	AA
<b>MISCELLANEOUS PARTS</b>				
P854	QPLGN0741CEZZ	J	Plug, 7-pin(YBN)	AC
P860	QPLGN0841CEZZ	J	Plug, 8-pin(GBN)	AB
			(32U-S50, 32U-S60)	
P860	QPLGN0541CEZZ	J	Plug, 8-pin(GBN)	AB
			(36U-S60)	
SC850	QSOCV0937CEZZ	J	CRT Socket	AL
	or		(32U-S50, 32U-S60)	
	QSOCV1011CEZZ			
SC850	QSOCV1011CEZZ	J	CRT Socket	AF
			(36U-S60)	
RDA850	PRDAR0248PEFW	R	Heat Sink, for IC850	AF
	LX-BZ3100CEFD	J	Screw	AA



Ref. No.	Part No.	★	Description	Code	Ref. No.	Part No.	★	Description	Code
<b>PWB-C: DUNTKA528WEA6</b>									
<b>AV UNIT</b>									
<b>INTEGRATED CIRCUITS</b>									
IC1401	VHiTC90A45F-1*	J	TC90A45F	AM	C1903	VCKYCY1HB681K*	J	680p 50V Ceramic	AA
IC1900	VHiCXA2089Q-1S	J	CXA2089Q	AN	C1904	VCEA0A1HW105M+J	1.0	50V EL.	AB
<b>TRANSISTORS</b>					C1905	VCEA0A1HW105M+J	1.0	50V EL.	AB
Q1401	VS2PD601AR/-1*	J	D601AR	AB	C1906	VCKYCY1HB681K*	J	680p 50V Ceramic	AA
	or				C1907	VCEA0A1HW105M+J	1.0	50V EL.	AB
Q1404	VS2PC1623L61E*	J	D601AR	AB	C1908	VCKYCY1HB103K*	J	0.01 50V Ceramic	AA
	or				C1909	VCEA0A1HW105M+J	1.0	50V EL.	AB
Q1405	VS2PD601AR/-1*	J	D601AR	AB	C1910	VCEA0A1HW105M+J	1.0	50V EL.	AB
	or				C1911	VCEA0A1HW105M+J	1.0	50V EL.	AB
Q1406	VS2SA812-M51E*	J	A812-M5	AC	C1912	VCEA0A1HW105M+J	1.0	50V EL.	AB
	or				C1913	VCEA0A1HW105M+J	1.0	50V EL.	AB
Q1407	VS2SB709AR/-1*	J	D601AR	AB	C1914	VCKYCY1HB681K*	J	680p 50V Ceramic	AA
	or				C1915	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA
Q1408	VS2SA812-M51E*	J	A812-M5	AC	C1916	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA
	or				C1921	VCKYCY1HB681K*	J	680p 50V Ceramic	AA
Q1409	VS2PD601AR/-1*	J	D601AR	AB	C1922	VCKYCY1CF104Z*	J	0.1 16V Ceramic	AA
	or				C1923	VCEA0A1CW107M+J	100	16V EL.	AC
Q1907	VS2PC1623L61E*	J	D601AR	AB	C1926	VCEA0A1CW226M+J	22	16V EL.	AB
	or				C1927	VCKYCY1HB681K*	J	680p 50V Ceramic	AA
Q1909	VS2SA812-M51E*	J	A812-M5	AC	C1928	VCEA0A1CW106M+J	10	16V EL.	AB
	or				C1929	VCKYCY1HB681K*	J	680p 50V Ceramic	AA
	VS2SB709AR/-1*				C1937	VCEA0A1HW105M+J	1.0	50V EL.	AB
<b>COILS</b>					C1938	VCEA0A1HW105M+J	1.0	50V EL.	AB
L1406	VP-XF330K0000*	J	Peaking 33μH	AB	C1939	VCEA0A1HW105M+J	1.0	50V EL.	AB
L1407	VP-XF150K0000*	J	Peaking 15μH	AB	<b>RESISTORS</b>				
L1408	VP-XF100K0000*	J	Peaking 10μH	AB	<i>[M-Ox. .... Metal Oxide]</i>				
L1410	VP-XF100K0000*	J	Peaking 10μH	AB	RJ11	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
L1411	VP-XF100K0000*	J	Peaking 10μH	AB	RJ13	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
L1413	VP-XF330K0000*	J	Peaking 33μH	AB	RJ14	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
L1414	VP-XF330K0000*	J	Peaking 33μH	AB	RJ15	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
<b>CAPACITORS</b>					RJ16	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
<i>[EL. .... Electrolytic]</i>					RJ17	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
C1415	VCCCCY1HH220J*	J	22p 50V Ceramic	AA	RJ18	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
C1416	VCEA0A1CW107M+J	100	16V EL.	AC	RJ19	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
C1420	VCCCCY1HH120J*	J	12p 50V Ceramic	AA	RJ21	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
C1421	VCCCCY1HH120J*	J	12p 50V Ceramic	AA	RJ22	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
C1424	VCCCCY1HH390J*	J	39p 50V Ceramic	AA	RJ23	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
C1428	VCKYCY1HB103K*	J	0.01 50V Ceramic	AA	RJ26	VRS-CY1JF000J*	J	00 1/16W M-Ox.	AA
C1429	VCKYCY1HB103K*	J	0.01 50V Ceramic	AA	R1402	VRS-CY1JF681J*	J	680 1/16W M-Ox.	AA
C1430	VCEA0A1CW106M+J	10	16V EL.	AB	R1403	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
C1436	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA	R1404	VRS-CY1JF182J*	J	1.8k 1/16W M-Ox.	AA
C1439	VCE9GA1CW106M+J	10	16V EL. (N.P)	AB	R1405	VRS-CY1JF471J*	J	470 1/16W M-Ox.	AA
C1441	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA	R1406	VRS-CY1JF821J*	J	820 1/16W M-Ox.	AA
C1442	VCFYFA1HA474J+	J	0.47 50V Mylar	AC	R1407	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
C1443	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA	R1420	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA
C1445	VCKYCY1CF104Z*	J	0.1 16V Ceramic	AA	R1422	VRS-CY1JF473J*	J	47k 1/16W M-Ox.	AA
C1446	VCCCCY1HH181J*	J	180p 50V Ceramic	AA	R1423	VRS-CY1JF223J*	J	22k 1/16W M-Ox.	AA
C1447	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA	R1424	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
C1453	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA	R1425	VRS-CY1JF221J*	J	220 1/16W M-Ox.	AA
C1454	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA	R1426	VRS-CY1JF391J*	J	390 1/16W M-Ox.	AA
C1456	VCKYCY1CF104Z*	J	0.1 16V Ceramic	AA	R1427	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
C1457	VCEA0A1CW476M+J	47	16V EL.	AB	R1428	VRS-CY1JF473J*	J	47k 1/16W M-Ox.	AA
C1458	VCEA0A1CW106M+J	10	16V EL.	AB	R1429	VRS-CY1JF223J*	J	22k 1/16W M-Ox.	AA
C1460	VCKYCY1HF103Z*	J	0.01 50V Ceramic	AA	R1430	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
C1470	VCCCCY1HH100D*	J	10p 50V Ceramic	AA	R1431	VRS-CY1JF122J*	J	1.2k 1/16W M-Ox.	AA
C1473	VCCCCY1HH100D*	J	10p 50V Ceramic	AA	R1432	VRS-CY1JF331J*	J	330 1/16W M-Ox.	AA
C1474	VCCCCY1HH150J*	J	15p 50V Ceramic	AA	R1433	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
C1900	VCKYCY1HB681K*	J	680p 50V Ceramic	AA	R1434	VRS-CY1JF471J*	J	470 1/16W M-Ox.	AA
C1901	VCKYCY1HB681K*	J	680p 50V Ceramic	AA	R1435	VRS-CY1JF102J*	J	1.0k 1/16W M-Ox.	AA
					R1459	VRS-CY1JF821J*	J	820 1/16W M-Ox.	AA
					R1900	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
					R1930	VRS-CY1JF223J*	J	22k 1/16W M-Ox.	AA
					R1932	VRS-CY1JF223J*	J	22k 1/16W M-Ox.	AA
					R1935	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
					R1936	VRS-CY1JF223J*	J	22k 1/16W M-Ox.	AA
					R1937	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
					R1938	VRS-CY1JF223J*	J	22k 1/16W M-Ox.	AA
					R1941	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
					R1942	VRS-CY1JF223J*	J	22k 1/16W M-Ox.	AA
					R1943	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
					R1944	VRS-CY1JF223J*	J	22k 1/16W M-Ox.	AA
					R1945	VRS-CY1JF101J*	J	100 1/16W M-Ox.	AA
					R1946	VRS-CY1JF103J*	J	10k 1/16W M-Ox.	AA
					R1954	VRD-RA2BE221J*	J	220 1/8W Carbon	AA



Ref. No.	Part No.	★	Description	Code
R1955	VRD-RA2BE221J*	J 220	1/8W Carbon	AA
R1956	VRS-CY1JF222J*	J 2.2k	1/16W M-Ox.	AA
R1957	VRD-RA2BE101J*	J 100	1/8W Carbon	AB
R1958	VRS-CY1JF101J*	J 100	1/16W M-Ox.	AA
R1959	VRS-CY1JF102J*	J 1.0k	1/16W M-Ox.	AA
R1960	VRD-RA2BE101J*	J 100	1/8W Carbon	AB
R1962	VRD-RA2BE101J*	J 100	1/8W Carbon	AB
R1964	VRD-RA2BE101J*	J 100	1/8W Carbon	AB
R1965	VRS-CY1JF222J*	J 2.2k	1/16W M-Ox.	AA
R1966	VRS-CY1JF102J*	J 1.0k	1/16W M-Ox.	AA
R1971	VRD-RA2BE101J*	J 100	1/8W Carbon	AB
R1972	VRD-RA2BE101J*	J 100	1/8W Carbon	AB

**MISCELLANEOUS PARTS**

P1904	QPLGN0541CEZZ	J	Plug, 5-pin(EJ)	AB
SC1901	QSOCN1598REZZ	X	Socket, 15-pin(VA)	AE
SC1902	QSOCN1598REZZ	X	Socket, 15-pin(VB)	AE
SC1903	QSOCN1098REZZ	J	Socket, 10-pin(VC)	AC
SLD1901	PSLDM0102GJFW	X	Shield	AP

**PWB-F: DUNTKB207WEA0(36U-S60)  
CONTROL UNIT****CAPACITOR***[EL.... Electrolytic]*

C4001	VCEA0A1HW476M+J	47	50V EL.	AB
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**RESISTORS***[M-Ox.... Metal Oxide]*

R4001	VRD-RA2BE470J*	J 47	1/8W Carbon	AA
R4006	VRD-RA2BE822J*	J 8.2k	1/8W Carbon	AA
R4007	VRD-RA2BE822J*	J 8.2k	1/8W Carbon	AA
R4009	VRD-RA2BE183J*	J 18k	1/8W Carbon	AA
R4011	VRD-RA2BE183J*	J 18k	1/8W Carbon	AA
R4020	VRD-RA2BE750J*	J 75	1/8W Carbon	AA

**SWITCHES**

S4001	QSW-K0003AJZZ+	J	POWER	AB
	or			
	QSW-K0079GEZZ+			
	or			
	QSW-K0202PEZZ+			
S4002	QSW-K0003AJZZ+	J	MENU	AB
	or			
	QSW-K0079GEZZ+			
	or			
	QSW-K0202PEZZ+			
S4003	QSW-K0003AJZZ+	J	VOL-Down	AB
	or			
	QSW-K0079GEZZ+			
	or			
	QSW-K0202PEZZ+			
S4004	QSW-K0003AJZZ+	J	VOL-Up	AB
	or			
	QSW-K0079GEZZ+			
	or			
	QSW-K0202PEZZ+			
S4005	QSW-K0003AJZZ+	J	CH-Down	AB
	or			
	QSW-K0079GEZZ+			
	or			
	QSW-K0202PEZZ+			
S4006	QSW-K0003AJZZ+	J	CH-Up	AB
	or			
	QSW-K0079GEZZ+			
	or			
	QSW-K0202PEZZ+			

**MISCELLANEOUS PARTS**

J904	QJAKGA009WJZZ	X	Jack	AG
P4001	QPLGN0541CEZZ	J	Plug, 5-pin(EJ)	AB
P4004	QPLGN0541CEZZ	J	Plug, 5-pin(KA)	AB

Ref. No.	Part No.	★	Description	Code
RMC4001	RRMCU0222CEZZ	J	Remote Receiver	AL
	or			
	RRMCU0235CEZZ			
	QCNW-A316WJZZ	X	Connecting Cord	AF
	QCNW-0153GJZZ	X	Connecting Cord	AK

**PWB-S: DUNTKA070WEV3  
MTS MODULE UNIT****INTEGRATED CIRCUIT**

IC3001	VHiCXA2074Q-1*	J	CXA2074Q	AY
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**CAPACITORS***[EL.... Electrolytic]*

C3001	VCE9GA1HW475M+J	4.7	50V EL. (N.P)	AB
C3002	VCKYCY1HB562K*J	5600p	50V Ceramic	AA
C3003	VCQYTA1HM123J+	J 0.012	50V Mylar	AA
C3004	VCEA0A1HW105M+J	1.0	50V EL.	AB
C3005	VCEA9A1HW475M+J	4.7	50V EL.	AB
C3006	VCEA0A1HW106M+J	10	50V EL.	AB
C3007	VCEA0A1HW475M+J	4.7	50V EL.	AB
C3008	VCKYCY1HF103Z*J	0.01	50V Ceramic	AA
C3009	VCEA0A1CW227M+J	220	16V EL.	AC
C3010	VCE9GA1HW475M+J	4.7	50V EL. (N.P)	AB
C3011	VCEA0A1HW475M+J	4.7	50V EL.	AB
C3012	VCE9GA1HW475M+J	4.7	50V EL. (N.P)	AB
C3013	VCKYCY1HB272K*J	2700p	50V Ceramic	AA
C3014	VCQYTA1HM473J+	J 0.047	50V Mylar	AA
C3015	VCEACA1HC335K+J	3.3	50V EL.	AC
C3016	VCE9GA1HW475M+J	4.7	50V EL. (N.P)	AB
C3017	VCEACA1CC106K+J	10	16V EL.	AC
C3018	VCEA0A1HW105M+J	1.0	50V EL.	AB

**RESISTORS***[M-Ox.... Metal Oxide]*

RJ1	VRS-CY1JF000J*	J 00	1/16W M-Ox.	AA
RJ2	VRS-CY1JF000J*	J 00	1/16W M-Ox.	AA
RJ3	VRS-CY1JF000J*	J 00	1/16W M-Ox.	AA
RJ4	VRS-CY1JF000J*	J 00	1/16W M-Ox.	AA
RJ5	VRS-CY1JF000J*	J 00	1/16W M-Ox.	AA
RJ6	VRS-CY1JF000J*	J 00	1/16W M-Ox.	AA
R3001	VRS-CY1JF221J*	J 220	1/16W M-Ox.	AA
R3002	VRS-CY1JF221J*	J 220	1/16W M-Ox.	AA
R3003	VRS-CY1JF105J*	J 1.0M	1/16W M-Ox.	AA
R3004	VRS-CY1JF104J*	J 100k	1/16W M-Ox.	AA
R3005	VRS-CY1JF623J*	J 62k	1/16W M-Ox.	AA
R3007	VRS-CY1JF332J*	J 3.3k	1/16W M-Ox.	AA
R3008	VRS-CY1JF302J*	J 3.0k	1/16W M-Ox.	AA
R3010	VRS-CY1JF392J*	J 3.9k	1/16W M-Ox.	AA
R3011	VRS-CY1JF102J*	J 1.0k	1/16W M-Ox.	AA
R3012	VRS-CY1JF102J*	J 1.0k	1/16W M-Ox.	AA
R3373	VRS-CY1JF000J*	J 00	1/16W M-Ox.	AA

**MISCELLANEOUS PARTS**

P3001	QPLGN0242FJ00	J	Plug, 10-pin(EA)	AE
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Ref. No.	Part No.	★	Description	Code
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## MISCELLANEOUS PARTS

△ ACC701	QACCD3065CESA	J	Ac Cord	AN
SP1	VSP1206PB648A	X	Speaker(L)	AN
	or			
	VSP1206PB598A			
SP2	VSP1206PB648A	X	Speaker(R)	AN
	or			
	VSP1206PB598A			
	LANGB0102GJFW	X	CRT Bracket	AH
	LHLDK0014PEZZ	R	AC Cord Holder	AD
	LHLDW1002PEZZ	R	Wire Holder	AB
	LHLDW1009PEZZ	R	Wire Holder	AA
			(32U-S50, 32U-S60)	
	LHLDW1033PEZZ	R	Holder	AA
	LHLDW1037PEZZ	R	Wire Holder	AB
			(32U-S50, 32U-S60)	
	LHLDW1060CEZZ	J	Holder	AB
			(32U-S50, 32U-S60)	
	LHLDW1060PEZZ	R	Wire Holder	AA
			(36U-S60)	
	LHLDW1062PEKZ	R	Wire Holder	AD
	LHLDW1074PEKZ	R	Wire Holder	AD
			(36U-S60)	
	LHLDZ1004GJZZ	X	Holder	AD
			(36U-S60)	
	LHLDZ1037MEZZ	X	HV Holder	AD
	LX-TZ0104GJFD	X	CRT Screw	AF
	LX-TZ3004CEFD	J	Screw	AA
	LX-TZ3011CEFD	J	Screw	AA
			(36U-S60)	
	LX-WZ0104GJFD	X	CRT Washer	AC
			(32U-S50, 32U-S60)	
	LX-WZ3006MEFD	X	CRT Washer	AD
			(36U-S60)	
	LX-WZ3013MEFD	X	CRT Washer	AD
			(36U-S60)	
	QCNW-0135GJZZ	X	Connecting Cord (EJ)	AH
			(32U-S50, 32U-S60)	
	QCNW-0136GJZZ	X	Connecting Cord (S)	AG
			(32U-S50, 32U-S60)	
	QCNW-0148GJZZ	X	Connecting Cord (S)	AG
			(36U-S60)	
	QCNW-0149GJZZ	X	Connecting Cord (YBN)	AG
			(36U-S60)	
	QCNW-0161GJZZ	X	Connecting Cord (GBN)	AG
			(36U-S60)	
	QCNW-0167GJZZ	X	Thunder Wire	AF
	QCNW-A081GJZZ	X	Connecting Cord (YBN)	AG
			(32U-S50, 32U-S60)	
	QCNW-A082GJZZ	X	Connecting Cord (GBN)	AH
			(32U-S50, 32U-S60)	
	TCAUH3044GJZZ	X	Caution Card	AD
			(32U-S50, 32U-S60)	
	TCAUH3048GJZZ	X	Caution Card	AD
			(36U-S60)	
	TLABZ0193GJZZ	X	Packing Case Label	AF
			(32U-S50)	
	TLABZ0192GJZZ	X	Packing Case Label	AF
			(32U-S60)	
	TLABZ0191GJZZ	X	Packing Case Label	AF
			(36U-S60)	
	XTASD30P12000	J	Screw	AA
	XTASD40P20000	J	Screw	AA

Ref. No.	Part No.	★	Description	Code
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## SUPPLIED ACCESSORIES

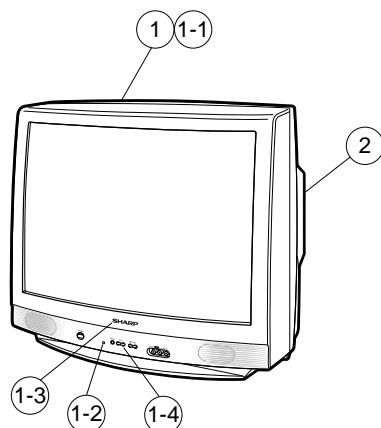
RRMCG1324CESA	X	Infrared R/C Unit	AR
TGAN-0001GJZZ	X	Guarantee Card	AB
TiNS-7646GJZZ	X	Operation Manual	AG
		(32U-S50)	
TiNS-7647GJZZ	X	Operation Manual	AG
		(32U-S60, 36U-S60)	

Ref. No.	Part No.	★	Description	Code
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## CABINET PARTS

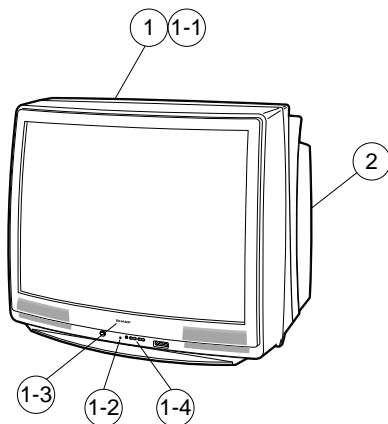
### 32U-S50

1	CCABA0172WEH0	X	Front Cabinet Ass'y	BG
1-1	Not Available	-	Front Cabinet	—
1-2	GCOVA0117GJKA	X	R/C Cover	AF
1-3	HBDGB1009MESB	X	Badge, "SHARP"	AG
1-4	JBTN-0133GJKA	X	Control Button	AL
2	GCABB0149GJKA	X	Rear Cabinet	BC



### 32U-S60 36U-S60

1	CCABA0161WEH1	X	Front Cabinet Ass'y (32U-S60)	BG
1	CCABA0173WEH0	X	Front Cabinet Ass'y (36U-S60)	BG
1-1	Not Available	-	Front Cabinet	—
1-2	GCOVA0119GJKA	X	R/C Cover	AF
1-3	HBDGB1009MESB	X	Badge, "SHARP"	AG
1-4	JBTN-0120GJKA	X	Control Button	AF
2	GCABB0158GJKA	X	Rear Cabinet (32U-S60)	BC
2	GCABB0157GJKA	X	Rear Cabinet (36U-S60)	BC

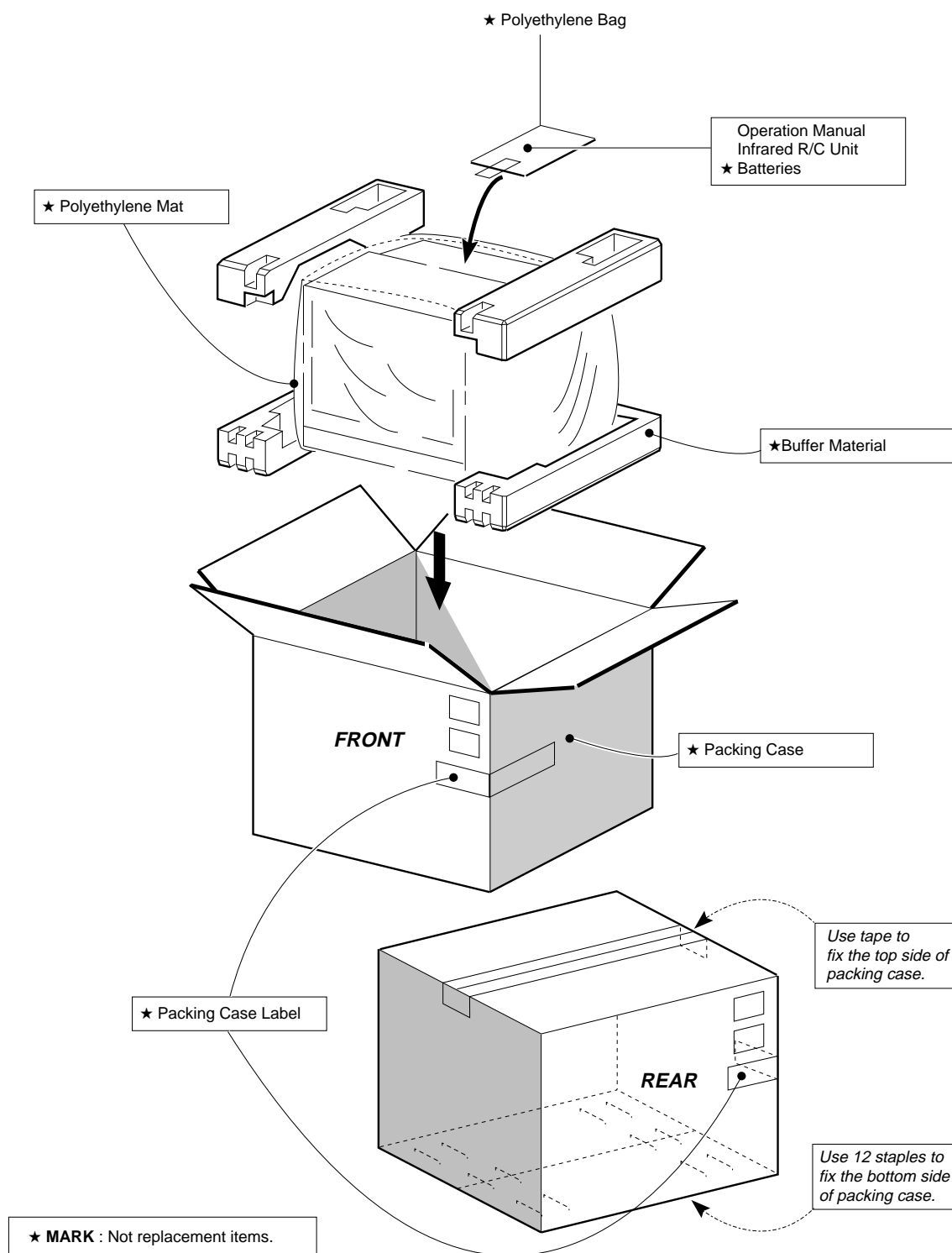


Ref. No.	Part No.	★	Description	Code
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## PACKING PARTS (NOT REPLACEMENT ITEM)

SPAKC0246GJZZ	-	Packing Case (32U-S50)	—
SPAKC0238GJZZ	-	Packing Case (32U-S60)	—
SPAKC0239GJZZ	-	Packing Case (36U-S60)	—
SPAKP0110GJZZ	-	Polyethylene Sheet (32U-S50, 32U-S60)	—
SPAKP0113GJZZ	-	Polyethylene Sheet (36U-S60)	—
SPAKX0126GJZZ	-	Buffer Material (32U-S50)	—
SPAKX0128GJZZ	-	Buffer Material (32U-S60)	—
SPAKX0129GJZZ	-	Buffer Material (36U-S60)	—
SSAKA0101GJZZ	-	Polyethylene Bag	—

## PACKING OF THE SET



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